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J. MANNS & CO.
1887 50th Anniversary 1937
BALTIMORE, MD.

Superior Seeds

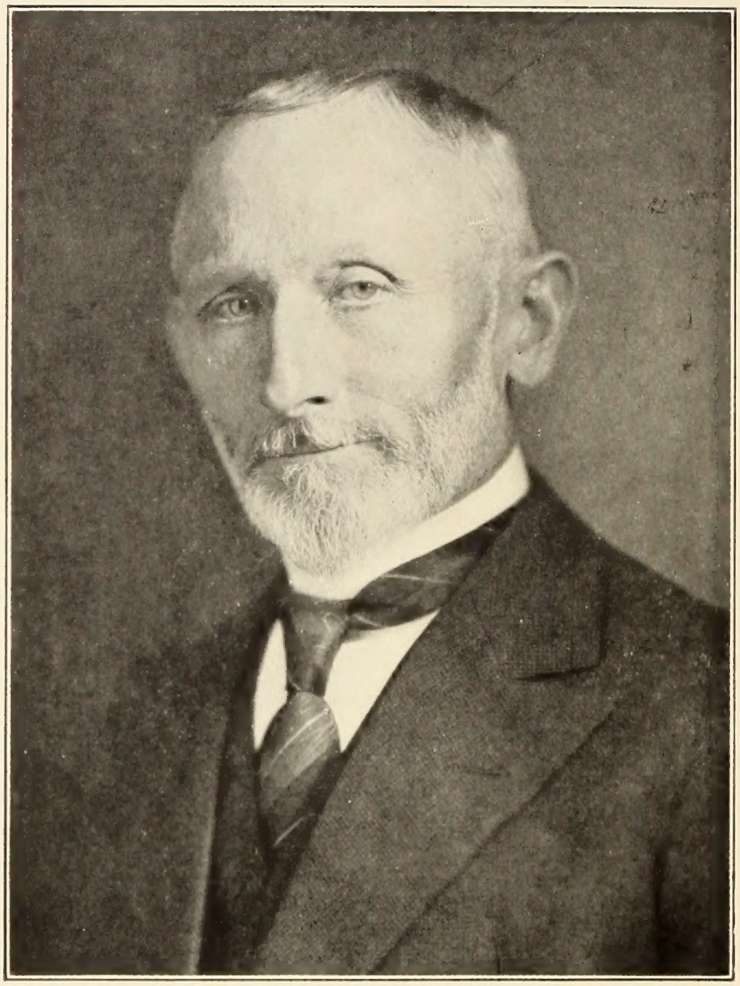
FARM and GARDEN SUPPLIES

Manns'

BALTIMORE, MD.

ENSOR and FORREST STS. AT BELAIR MARKET

1887



1937

JOHN MANNS

Fifty Years of Proven Service

Time proves all business. We are proud that you have enabled us to complete fifty years of successful endeavor. During these fifty years, J. Manns & Co., has supplied quality seeds and treated the public fairly. The fact that you have profited by this policy is shown by your loyalty.

You have made our Fiftieth Anniversary possible. And with this testimony of good faith, we are encouraged to begin our fifty-first year with the determination to please you and to supply your requirements **even** better than in the past.

Fifty years ago, Mr. John Manns studied the problems of farmers and vegetable growers and realized their need for a dependable service supplying their requirements. With this in mind, he established a business and built up an organization which has never ceased to keep advancing and offering to the trade the latest and best seeds and supplies of the times.

In appreciation of your help in making this Fiftieth Anniversary possible we are sending this special catalog and assure you of our personal interest in serving you honestly and efficiently during 1937.

Ensor and Forrest Streets
At Belair Market
Baltimore, Maryland

J. Manns & Co.

Telephone:
Wolfe 5161

Quality of Strains Proven
at Our Trial Grounds

ORDER SHEET

Established 1887

J. MANNS & CO.

Superior Seeds

BALTIMORE, MD.

FORREST and HILLEN STS. (AFTER APRIL 1st, ENSOR and FORREST STS.) AT BELAIR MARKET

HAVE YOU ALLOWED FOR NECESSARY POSTAGE ON MANUFACTURED ARTICLES?

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J. MANNS & CO., give no warranty express or implied, as to description, quality, productiveness or any other matter, of any Seeds, Bulbs, Plants they sell, and will not be in any way responsible for the crop. If purchaser does not accept the goods on these terms, they are at once to be returned.

QUANTITY	ARTICLES	PRICE	
	Amount Carried Forward,		

WANTED—Names and addresses of your acquaintances who should receive our Annual Catalog, Price Lists, etc. We will appreciate your kindness and so will they.—Thank you.

NAMES	POST OFFICE	STATE

QUANTITY	ARTICLES	PRICE	
	Amount Brought Forward,		

Selecting HEADED plants for seed production. (It could be grown much cheaper.) Just another proof of the care taken to have Manns' seeds of the best possible quality.

MANNS' SUPERIOR SEEDS

Continuously Successful Since 1887

Preferred by Thousands of Market Gardeners BECAUSE

1. They are selected by trial from the World's Best Strains.
2. Carefully rogued to maintain the high standard of perfection required by critical Commercial Growers who appreciate quality.
3. Vitality tests are made by the most modern methods, and trial grounds are operated under personal supervision for your protection.
4. Our prices are low, the result of our advantageous location, capable personnel, and long years of practical experience under the original management.

Seeds, Bulbs, Plants, Farm and Garden Supplies are not departments or side-lines with us, but the very items which determine our success. They MUST be good. They MUST be dependable.

Phone Wolfe 5161 *Suburban Delivery*

Prompt, Courteous, and Intelligent Attention Always

MAIL ORDERS: We pay Parcel Post or Express Charges on all vegetable and flower seeds, except Beans, Corn, Peas, and Seed Potatoes. This enables distant customers to use Manns' Superior Seeds at no additional expense.

PLEASE READ—Non-Warranty

It is very evident to anyone who gives the matter the slightest thought that it is to our best interests to send out only such stock as will grow and prove true to name and description. There are, however, so many contingencies to be encountered, entirely beyond our control, such as the weather, soil and other conditions that: **J. Manns & Company give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Plants or Bulbs sent out, and will not be in any way responsible for the crop.**

Domestic Parcel Post Rates Within the U. S. and Possessions		For First Pound	For Ea. Addit'l. Pound
First Zone within	50 miles	$0.08	$0.01
Second Zone within	50 to 150 miles	.08	.01
Third Zone within	150 to 300 miles	.09	.02
Fourth Zone within	300 to 600 miles	.10	.04
Fifth Zone within	600 to 1000 miles	.11	.05
Sixth Zone within	1000 to 1400 miles	.12	.07
Seventh Zone within	1400 to 1800 miles	.14	.09
Eighth Zone over	1800 miles	.15	.11

All Prices Quoted Subject to Change

HOW AND WHEN TO PLANT VEGETABLES

Vegetables	Seeds or Plants to Provide For Family of Five	Date to Sow or Plant Outdoors		Depth to Cover	Space Between Rows	Set Plants or Thin Out to	Time Required to Produce Crop	Number of Running Feet of Row for Family of 5	Special Notes
		First	Last	Inches		Inches			
Asparagus	1 oz. or 50	Mar. 20	Aug. 1	Seeds 1 in. Plants 4 in.	3 to 4 ft.	12 in.	Seeds 4 years Plants 2 years	50 ft.	A well-cared for bed improves with age and lasts for many years.
Beans (Bush)	4 lbs.	April 20	Aug. 15	2 in.	2 ft.	3 to 4 in.	60 to 90 days	200 ft.	Select, early, midseason and late in both green and wax podded kinds.
Beans (Pole) (Limas, see below)	3 pkts.	May 5	Aug. 1	2 in.	3 to 4 ft.	3 ft. (hills)	90 to 120 days	80 to 100 hills	Select early and late, green and wax pod.
Beet	2 oz.	Mar. 20	Aug. 15	½ to 1 in.	18 in.	2 to 3 in.	60 to 80 days	80 ft.	Select early, midseason and late kinds for winter storage.
Borecole or Kale	1 pkt.	April 20	Sept. 1	⅛ in.	2½ ft.	12 in.	80 to 100 days	20 ft.	Sow during July for Fall use.
Broccoli	1 pkt.	April 5	Aug. 10	½ to 1 in.	2½ ft.	24 in.	120 days	20 ft.	Handle exactly like Cauliflower.
Brussels Sprouts	1 pkt. or 15	May 5		Seed ½ in.	2½ ft.	24 in.	120 days	20 ft.	The most delicate of all the cabbage tribe.
Cabbage	36	April 20	Sept. 15		2 to 3 ft.	18 to 24 in.	100 to 150 days	60 ft.	Set out 2 doz. early, 1 doz. midseason and 2 doz. late kinds.
Chinese Cabbage	1 pkt.	July 20		¼ in.	2½ ft.	12 in.	80 to 100 days	20 ft.	Sow only on August 1st for Fall use only.
Carrot	½ oz.	Mar. 20	Aug. 1	½ in.	1½ to 2 ft.	2 to 3 in.	45 to 60 days	40 ft.	Sow short rows often. Sow on August 1st for winter storage.
Cauliflower	24	April 5	July 10		2 to 3 ft.	2 ft.	120 to 150 days	20 ft.	Treat very much like Cabbage.
Celery	½ oz. or 60	Mar. 20		Seed ¼ in.	3 ft.	6 in.	100 to 120 days	60 ft.	Select an early and a late variety.
Corn (Sweet)	1 lb.	April 20	July 15	2 in.	3 ft.	12 in.	80 to 120 days	200 ft.	Sow in blocks of short rows, for perfect pollenization.
Cucumber	1 pkt.	April 20	Aug. 5	¾ in.	4 to 5 ft.	(3 to hill) 36 in.	60 to 80 days	10 hills	When picking, cut stems; do not pull vines.
Eggplant	12	May 20			2½ ft.	24 in.	100 to 120 days	20 ft.	Needs lots of heat and frequent hoeing.
Endive	1 pkt.	April 5	July 25	⅛ in.	2 ft.	12 in.	60 to 80 days	40 ft.	To bleach, tie plants into cone shape.
Kohl-Rabi	1 pkt.	April 5	Aug. 10	¼ to ½	1½ to 2 ft.	4 to 6 in.	60 to 80 days	60 ft.	Should be used when roots reach a diameter of 2½ in.
Leek	1 pkt.	Mar. 30		½ in.	2 ft.	4 in.	100 days	20 ft.	Grow like Onions and hill to bleach stalks.
Lettuce	2 oz. (4 kinds)	Mar. 20		¼ in.	1½ to 2 ft.	10 to 12 in.	45 to 60 days	150 ft.	Should be thinned out to stand a foot apart.
Lima Beans (Bush)	1 lb.	May 5	July 15	1 in.	2½ to 3 ft.	2 ft. (hills)	100 days	40 ft.	
Lima Beans (Pole)	2 pkts.	May 15	July 10	1 in.	3 ft.	3 ft. (hills)	120 days	20 hills	Select an early and a late variety in both classes.
Melons	1 pkt.	May 10		½ to 1 in.	4 ft.	4 ft. (hills)	100 to 120 days	10 hills	See note on Cucumbers.
Onions	1 oz.	Mar. 20		¼ to ½ in.	18 in.	3 or 4 in.	80 to 110 days	80 ft.	Weeding and hoeing are their chief requirements.
Onion Sets	1 qt.	Mar. 20			12 in.	2 in.	30 to 60 days	40 ft.	
Parsley	1 pkt.	Mar. 20	Aug. 10	¼ to ½	15 to 18 in.	4 in.	100 to 120 days	50 ft.	Seed requires 3 to 6 weeks to germinate.
Parsnips	1 pkt.	April 5	June 1	½ to 1 in.	15 to 18 in.	2 to 4 in.	150 days	50 ft.	Cultivate well during the growing season.
Peas	3 lbs.	Mar. 20	Aug. 10	2 in.	2½ ft.	1 in.	60 to 100 days	200 ft.	The early smooth seeded sorts may be sown a month before the later, wrinkled varieties.
Pepper	12	May 5	Aug. 20		3 ft.	2 ft.	100 days	20 ft.	See note on Eggplants.
Potatoes	15 lbs.	Mar. 20		4 in.	3 ft.	6 in.	100 days	200 ft.	Really a farm crop.
Pumpkin	1 pkt.	May 20	July 1	½ in.	4 to 6 ft.	4 ft. (hills)	100 to 120 days	12 hills	When storing, prevent bruising.
Radish	3 pkts.	Mar. 20	Sept. 15	½ in.	18 in.	1 to 4 in.	30 to 60 days	50 ft.	Spring sorts can be grown quite close. Summer and fall varieties require more space.
Rhubarb	6	Mar. 20	Oct. 1		3 ft.	3 ft.	60 days	20 ft.	Requires a lot of space and plenty of manure.
Rutabaga	1 pkt.	Mar. 20	July 20	⅛ in.	2 ft.	6 in.	90 to 100 days	40 ft.	Sow around August 1st for winter use.
Salsify	½ oz.	April 5	June 1	1 to 1½ in.	15 to 18 in.	2 to 4 in.	100 to 150 days	25 ft.	Can be stored for winter use or left in ground until spring.
Spinach	1 oz.	Mar. 20		½ in.	12 in.	2 to 4 in.	60 days	75 ft.	Plant short rows often.
Squash	1 pkt.	April 20		½ to 1 in.	4 to 6 ft.	4 ft. (hills)	100 to 120 days	12 hills	See note on Pumpkins.
Swiss Chard	½ oz.	Mar. 20	Aug. 10	½ to 1 in.	1½ to 2 ft.	6 in.	90 to 100 days	40 ft.	Treat like Beets.
Tomato	1 pkt. or 48	Seeds Feb. 18 indoors Plants May 5		Seed ½ in.	3 to 4 ft.	3 ft.	100 to 120 days	150 ft.	For best results train to stakes or trellis.
Turnips	1 pkt.	Mar. 20	July 1 Aug. 31	⅛ in.	15 to 20 in.	2 to 4 in.	60 to 80 days	60 ft.	Sow again in August for winter use.

In the vicinity of Baltimore many varieties are sown in hot-beds during February, March and April to be planted out about May 10th, or earlier in the case of some varieties where the plants may be hardened off.

Some vegetables, such as Cabbage, Lettuce and Spinach, are sown at varying dates, according to variety.

This chart, with dates changed to conform with weather conditions in the vicinity of Baltimore, is used with permission of the manufacturers of Planet Jr. Garden Tools.

Varieties of Special Merit

OUR general stocks are unexcelled in quality and better seeds cannot be purchased at any price. The following recently improved strains, however, are worthy of special consideration and should be grown by every progressive market gardener.

FLOWER SEED NOVELTIES

The New Flower creations of outstanding value are listed in the alphabetical arrangement of annuals and perennials—pages 43 to 56. We call your special attention to the following:

Asters, Wilt-Resistant, page 43.
Marigold, Crown of Gold, page 46.
Marigold, Sunset Giants, page 46.
Calendula, Orange Shaggy, page 44.
Cornflower, Jubilee Gem, page 44.
Cosmos, Sensation, page 45.
Cosmos, Orange Flare, page 45.
Zinnia, Double Mexican Haageana, page 50.
Zinnia, Fantasy, page 50.
Snapdragons, Rustproof, page 43.
Larkspur, Giant Imperial, page 46.
Campanula, Annual, page 44.
Nasturtiums, Double Hybrids, page 47.
Petunia, Flaming Velvet, page 47.
Petunia, Martha Washington, page 47.

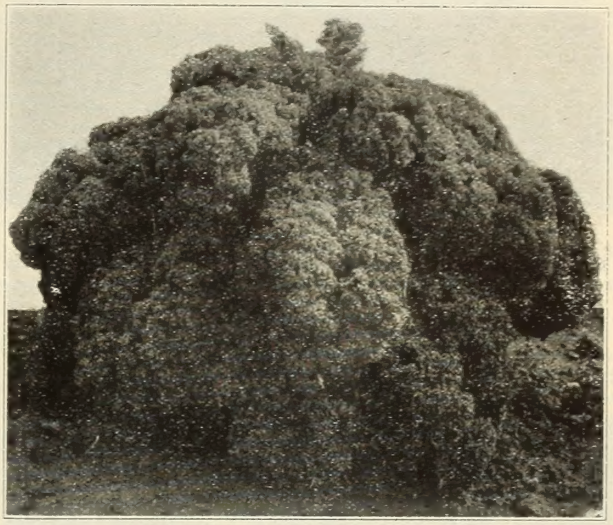
BORECOLE

SUPERIOR EXTRA CURLED GREEN SCOTCH—More curled than any other Borecole and yielding many more bushels per acre due to its extremely vigorous growth. Nearly as hardy as Hardy Winter and now very popular with many of our customers. **Pkt. 10c; oz., 15c; ¼ lb., 30c; lb., $1.00.**

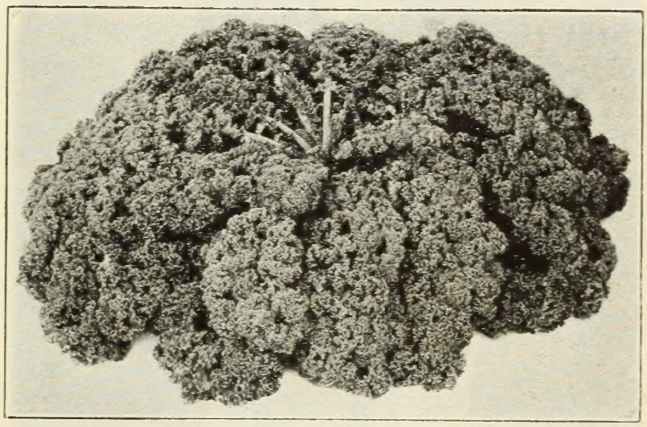
CURLED PERFECTION—An improved dwarf type, specially rogued and developed from a privately held American stock. Well curled and of a wonderful dark green color; winters well and commands top prices. **Oz., 15c; ¼ lb., 25c; lb. 85c.**

BROCCOLI

(See page 10)

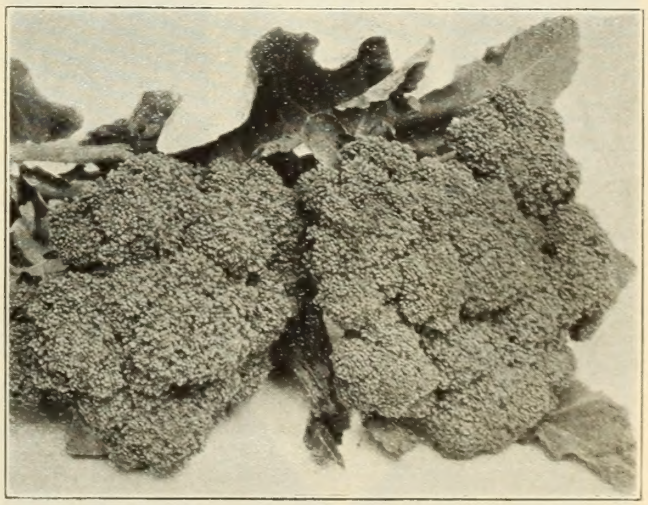


Borecole—Superior Extra Curled

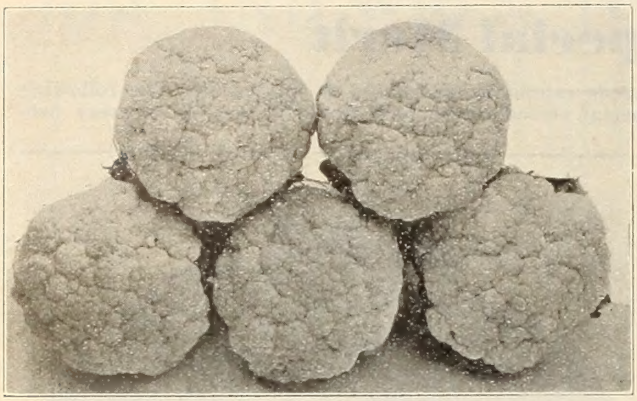


Borecole—Curled Perfection

Broccoli—Sprouting or Turnip Salad



Broccoli—Calabrese Heading

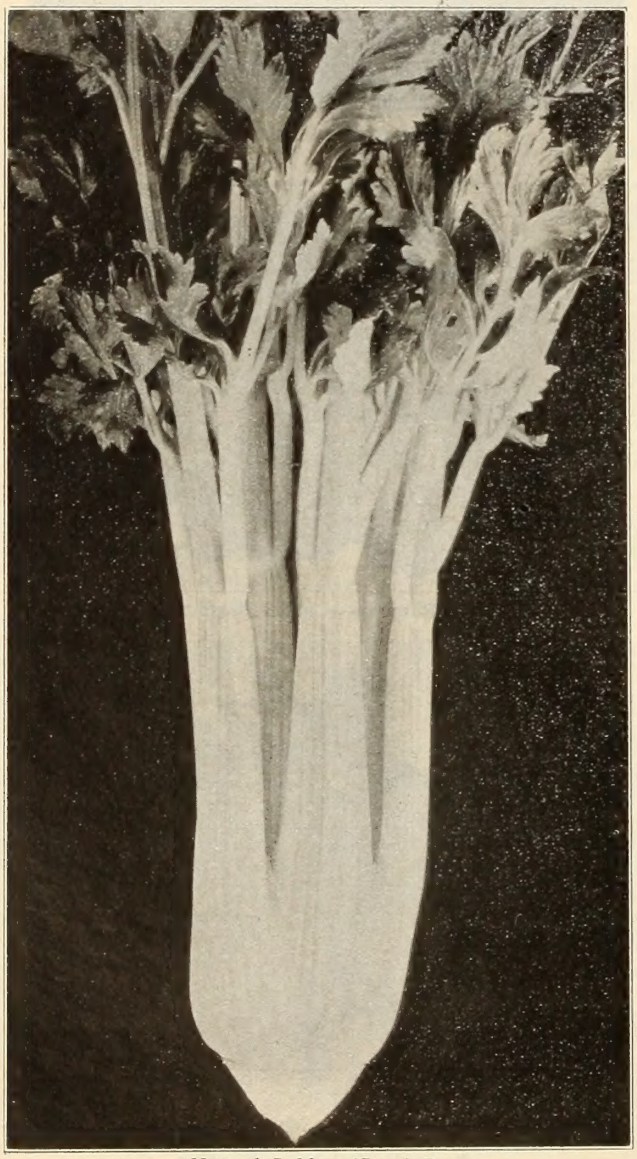


CAULIFLOWER

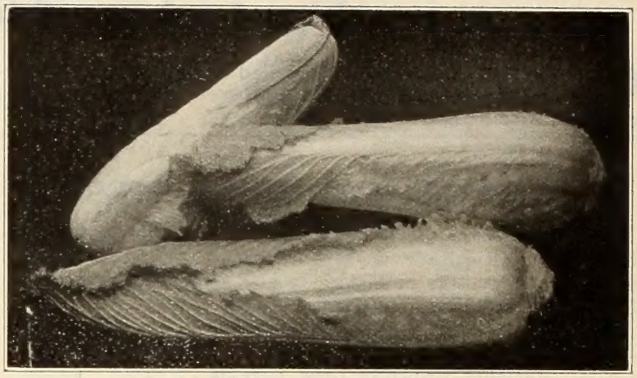
Cauliflower—Manns' Sure Heading Strains can be as easily grown as cabbage. (See page 14.)

CELERY

MANNS' GOLDEN (Special)—A more uniform strain of Golden Plume, has better hearts, is earlier and more easily blanched than other types. Strictly dependable for commercial production. **Oz., 50c; ¼ lb., $1.75; lb., $6.00.**



Manns' Golden (Special)



CHINESE CABBAGE

CHIHILI (or Improved Pekin)—A longer and more slender type than Wong Bok, rapidly becoming popular in New York and Washington markets. Of excellent quality and should be more generally grown. (See page 14.)

CANTALOUPE

JASPER—A local green-fleshed strain now very popular in Anne Arundel County (Md.) as an early shipping variety of good quality; shape more elongated than Bottomly, earlier and somewhat shorter than Long John. Seed saved from strictly true full sized fruits. **Oz., 15c; ¼ lb., 40c; lb., $1.25.**

CARROT

SUNRISE—A favorite with market garden trade because of its fine quality, perfect shape and attractive color. Specially valuable for medium and late use, an excellent keeper and thoroughly dependable. **Oz., 15c; ¼ lb., 30c; lb., $1.00; 10 lbs., $8.50.**

CORN

MANNS' EARLY SUPERIOR—This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener. **Qt., 40c; pk., $1.75; bu., $6.00.**

MANNS' No. 56—The best, largest, most saleable early market corn we ever have known. It can be planted extremely early without danger of rotting, which makes it possible to produce marketable ears at least five weeks ahead of Stowell's Evergreen. Resembles sugar corn, an excellent shipper and a money maker. **Qt., 40c; pk., $2.00; bu., $7.50.**

HYBRID CORN

Every market gardener should now "get wise" to hybrid corn if he has not already done so. The increased yield of handsome, prime quality ears assures far greater profits than is possible with regular varieties. The crop matures uniformly and can therefore be cut in large quantities at one time. We offer **Stowell's Evergreen Hybrid** and **Golden Cross Bantam.** (See page 16.)

CUCUMBER

STRAIGHT 8—An "All American" Gold Medal Winner of 1934. Symmetrical fruits, well rounded at both ends, regularly eight inches long and from 1¾ to 2 inches in diameter; deep green without pale stripes or tips. Vines vigorous and remarkably productive. Originator's stock. **Oz., 15c; ¼ lb., 45c; lb., $1.50.**

LETTUCE

NEW YORK SPECIAL—Ten days to two weeks earlier than regular New York. Slightly smaller but more uniform in heading and greatly resistant to excessive heat. **Pkt. 10c; oz., 20c; ¼ lb., 50c; lb., $1.50.**

NEW YORK No. 515—Developed for resistance to tip burn; a few days earlier than N. Y. Special and well adapted for late spring and early fall production. Heads medium large, compact and attractive. **Oz., 20c; ¼ lb., 60c; lb., $2.00.**

PARSLEY

GREEN CASTLE—An extremely hardy, late or main crop market gardeners variety which grows rather slowly early, but is tall, densely curled and can be depended upon as the most profitable Parsley for fall and winter crop. **Oz., 15c; ¼ lb., 20c; lb., 60c; 10 lbs., $5.00.**

PEAS

CALIFORNIA MAMMOTH—A very profuse bearer of large, handsome, dark green, pointed pods. Medium early and a very profitable variety to grow as a succession to Early Bird or the Laxtonian Types. **Qt., 40c; pk., $2.25; bu., $8.00.**

GILBO—A new, very prolific main crop variety of excellent quality, 10 days later than Early Bird, somewhat hardier than the average wrinkled seeded sorts, vine 24 to 28 inches, dark green, pointed pods, 4½ to 5 inches long. **Qt., 40c; pk., $2.50; bu., $9.00.**

No. 95 ICER—Very productive 2-foot vines, pods dark green and pointed, averaging 4¾ inches long. Five days later than Gilbo. A high quality type developed in the West for shipping to our Eastern markets; hence the name "Icer." **Qt., 40c; pk., $2.25; bu., $8.00.**

RUTABAGA

NEW CANADIAN—Grown for a number of years in the North and held very closely by private individuals, the seed of this variety has always been extremely difficult to procure in a true and reliable type. After three years of searching and checking in our trial grounds, we have found the correct strain and offer it with every assurance that it will soon become the only Rutabaga grown in this section. **Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., $1.25.**

SPINACH

NEW SUMMER SAVOY—Stands warm weather without bolting to seed better than any other Savoy-leaved type. A great improvement even on Bloomsdale Long Standing. Very dark green. **Lb., 25c; 10 lbs., $1.90; 25 lbs., $4.25; 100 lbs., $15.00.**

Radish, Scarlet Globe No. 8

RADISH

SCARLET GLOBE No. 8—So uniform in its maturity that each sowing can be entirely gathered and bunched at one pulling, with practically no waste. This means more bunches per row, more time saved in bunching, and the ground ready for the next crop a week earlier. **¼ lb., 25c; lb., 75c; 10 lbs., $6.00; 100 lbs., $50.00.**

COMET—A new Dutch variety, winner in the 1935 "All American" trials. Very long-standing, acquiring large size for such an early variety before becoming pithy. Globe to olive shaped, bright scarlet, uniform roots, crisp and solid. **Oz., 15c; ¼ lb., 25c; lb., 85c.**

TOMATOES

Improved Advance — **Special Marglobe**
Rutgers Certified — **Scarlet Dawn**

(See page 36)

Spinach, Isolated Plants Caged for Stock Seed.
(See page 32)

ASPARAGUS

1 ounce to 60 feet of drill; 1 pound per acre; 3,000 plants per acre.

Sow in spring in drills about eighteen inches apart and two inches deep in light, rich soil, planting fifteen to twenty seed to each foot of row. Thin to about one inch apart and give frequent and thorough cultivation during the summer.

Set the plants about four inches deep and one to two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure and about one quart of salt and double the quantity of fresh wood ashes to each square rod and cultivate well as long as the size of plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times. After the final cutting, give a good dressing of manure, ashes and salt.

MARY WASHINGTON—Superior to Martha Washington and Washington Pedigree, in quality and equally resistant to disease. It is larger and earlier and produces remarkably tender dark green stalks with very compact purplish green tips. **Pkt., 10c; 2 ozs., 15c; ¼ lb., 25c; lb., 75c.**

ASPARAGUS ROOTS

From one to two years may be saved by planting Asparagus roots instead of seed. Choice, 2-year-old roots, all leading varieties. $1.25 per 100; $8.00 per 1,000. MARY WASHINGTON, $1.25 per 100; $8.50 per 1,000.

ARTICHOKE

LARGE GREEN GLOBE—About 500 plants from 1 ounce. The scale-like leaves of the flower heads are used as a salad or boiled, making a delicious dish which is very popular with the French and Italians. **Pkt., 10c; oz., 50c; ¼ lb., $1.50; lb., $5.00.**

JERUSALEM OR TUBEROUS ROOTED—Grown exclusively for their large potato-like roots which are valuable for feeding hogs. **Price, ¼ pk., 45c; pk., $1.25; bu., $4.00. Expressage extra.**

Burpee's Stringless Improved

BUSH BEANS

1 pint to 100 feet of drill; 1 to 1½ bushels per acre.

Beans are tender and should not be planted until the soil is well warmed. Sowing too early will often result in a poor stand and uneven ripening. Sow the seed 1½ to 2 inches deep in rows not less than 18 inches apart and firm the soil to assist germination. Allow the plants to stand 4 to 10 inches apart in the row according to variety.

Shallow cultivating and hoeing should be done frequently until the vines are in blossom. To prevent blight do not cultivate deeply and avoid working them while the vines are wet. Beans grow best in a warm, well-drained, sandy loam. For succession plant every two weeks until about August 15th.

ROUND GREEN PODDED VARIETIES

Asgrow (Stringless Black Valentine.) Fully as early as the regular stringy Black Valentine but producing exceptionally long, oval or nearly round pods. Extremely prolific, entirely stringless, and of highest quality.

Burpee's Stringless Green Pod (Improved) Very popular and can be profitably grown by either trucker or home gardener. It combines vigor, earliness and productiveness. The pods are produced in abundance and are handsome in appearance, being rich dark green in color, smooth, absolutely round, meaty, stringless, free from fiber, and of exceptionally delicate quality. Mature for picking condition in 45 days.

New Stringless Green Pod This new highly productive strain has many Full Measure characteristics bred into it. Its prolific nature, season of growth, length, roundness of pods and appearance, are definitely inherited and yet to these very desirable features has been added a wonderful degree of hardiness which helps New Stringless withstand adverse weather conditions better than its parent stock.

Giant Stringless Green Pod A very productive long, round-podded variety, longer and straighter than Burpee's Stringless.

Full Measure Stringless A second early, round-podded, stringless bean of recent introduction. The pods are straight, meaty, and are dark green in color. They are entirely stringless and measure 6 to 8 inches in length. Very prolific.

Dwarf Horticultural or Dwarf Cherry One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a snap bean. As a green shelled bean it is equal to the lima in quality while any surplus crop can be kept for winter use. The pods are 5 inches long, stout, flat and stringless. They are green at first changing as they mature to yellow splashed with carmine. The dried seeds are large, almost round, light buff spotted with dark red. Our special stock of this variety is superior to the old style Dwarf Cherry, being entirely stringless and free from runners.

Black Valentine This variety has proven itself to be the most hardy of all string beans. It will resist cold and wet better than any other sort and therefore can be planted extremely early and very late in the season. They should be picked as soon as ready as they will become tough if allowed to remain on the vines too long.

Late Refugee or Thousand-To-One Noted for its great productiveness, this variety has gained favor for canning and pickling. The dense foliage protects the pods from early frosts, thereby prolonging the season. The pods measure 5 to 5½ inches, are round, somewhat slender, almost stringless and of good quality.

FLAT PODDED GREEN STRINGLESS

Bountiful Extra early, green pod, good cropper, hardy, prolific; pods long, straight, thick-flat, entirely stringless, good quality. The best extra early, semi-round variety.

PRICES

GREEN PODDED VARIETIES	Pt.	Qt.	Pk.	Bu.
Asgrow—Stringless Black Valentine	$ .20	$ .35	$2.00	$7.50
Black Valentine	.20	.30	2.00	7.50
Bountiful	.20	.35	2.00	7.50
Burpee's Stringless Green Pod	.20	.35	2.00	7.50
Dwarf Horticultural or Dwarf Cherry	.20	.35	2.00	7.50
Full Measure Stringless	.20	.35	2.00	7.50
Giant Stringless Pod	.20	.35	2.00	7.50
New Stringless Green Pod or Tendergreen	.20	.35	2.00	7.50

Let us quote special price on large quantities

Full Measure

Increased yields result from Nitragin Inoculation

Block of Selected Pedigreed Stock Seed on Idaho Breeding Farm

WAX BEANS

Sure Crop Wax Decidedly better quality than Currie's Rust Proof but vine and seed very similar in appearance, and maturing about a week later. The pods are of a rich yellow color, growing an inch longer than Currie's and stringless at all stages of growth. The disease resistant qualities found in Currie's are duplicated in this variety and it is vigorous, hardy, and very productive. For quality use Sure Crop, while for earliness Currie's is better.

Currie's Rust Proof Wax This variety is not stringless, but being the earliest, hardiest and one of the most prolific of all flat wax-podded beans, has become a favorite among market gardeners and truckers. It is ready for picking in 42 days and the large, flat, straight pods which are of a bright golden yellow color make an attractive appearance when offered for sale. The vines are strong and upright, holding the pods well off the ground, their vigorous and hardy nature making them immune from rust, mildew or blight.

Round Pod Kidney Wax (Brittle Wax.) An excellent early round-podded variety of handsome appearance. Pods are long, straight, brittle, meaty; entirely stringless and of exceptionally desirable quality. The best round-podded wax bean for the home garden.

Burpees New Kidney Wax Resembles Wardwell's Kidney Wax, excepting that the pod is larger and thicker, though not so broad. Fairly productive and of high quality, stringless, very fleshy and brittle. Pods measure 6 inches and are of attractive, clear yellow color. Mid-season sort; not damaged by wet weather.

BUSH BEANS

VARIETIES USED AS SHELL BEANS

Dwarf Horticultural, Fordhook Favorite, and Davis' White Kidney Wax. Three very satisfactory shell bean sorts have been listed previously.

White Marrowfat This is a very prolific variety and has become a choice family sort both for green shells and dry beans. Pods are broad, about 5½ inches long, medium green changing to yellow, having large, clear, white seeds which cook very dry and mealy.

Royal Dwarf or White Kidney Excellent late variety, green, shelled or dry. Seeds are large, white, kidney shaped, and of fine quality.

Erfurt Special (New) If you grow Italian varieties of FAVA, BROAD BEANS, ERFURT BEANS, be sure to grow Erfurt Special this year in preference to any other variety. It is much earlier, extremely large and of excellent quality. Qt., 40c; pk., $2.50; bu., $9.00.

Broad Erfurt Of foreign origin and entirely different from any other variety, being larger than the ordinary lima, with much darker pods. This sort will prove profitable for market gardeners who have Italian and Spanish trade.

POLE BEANS

EDIBLE PODDED

For Cultural Directions See Pole Limas.

Burger's Stringless Green Pod or White Kentucky Wonder Bears large, brittle, stringless pods of excellent flavor, dark green in color. It resembles the Kentucky Wonder in form of pod but is much earlier, more productive and bears longer. Seeds white, fine for baking.

Kentucky Wonder or Old Homestead This old standard variety is extremely productive and of finest quality. It is early and produces round, green pods about 9 inches long. Splendid for use as snaps for the home gardener as it continues to bear for a long period. Seed light brown.

Horticultural Cranberry or Wren's Egg An old favorite, excellent both as a snap and shell bean. Medium early, producing large quantities of 5 and 6-inch pods which are broad, thick, and of fine flavor.

Lazy Wife One of the best general purpose pole beans; of superior quality as a snap, green shelled or dried bean. Pods, which are borne abundantly throughout the summer, are very easily gathered and entirely stringless, brittle, light green in color and of a mild, sweet flavor. Seed pure white, 6 to 8 in each pod.

Yard Long, Celestial or Asparagus Bean Somewhat of a curiosity and yet possessing excellent qualities. It is very prolific, absolutely rust proof and a rank grower. It will produce pods 18 to 24 and sometimes 30 inches long. An excellent table vegetable, the pods being tender, stringless and of a rich asparagus flavor.

PRICES

WAX VARIETIES	Pt.	Qt.	Pk.	Bu.
Burpee's New Kidney Wax	$ .20	$ .35	$2.25	$8.00
Currie's Rust Proof Wax	.20	.35	2.25	8.00
Davis' White Kidney Wax	.20	.35	2.25	8.00
Pencil Pod Black Wax	.20	.35	2.25	8.00
Round Pod Kidney Wax	.20	.35	2.25	8.00
Sure Crop Wax	.20	.35	2.25	8.00
Unrivaled Wax	.20	.35	2.25	8.00
POLE BEANS				
Burger's Stringless or White Kentucky Wonder	.20	.35	2.00	7.00
Horticultural Cranberry	.20	.35	2.00	7.00
Kentucky Wonder	.20	.35	2.00	7.00
Lazy Wife	.20	.35	2.00	7.00
	Oz.	Lb.		
Yard Long, Celestial	$0.10	$1.00		
BUSH BEANS				
Erfurt Special		.40	2.50	9.00
Broad Erfurt		.40	2.50	9.00
White Kidney		.35	2.00	7.50
White Marrowfat		.35	2.00	7.50

POLE LIMA BEANS

1 quart to 150 hills; 8 to 10 quarts per acre.

Pole beans do not bear as early as the bush varieties but they are more productive, their bearing season is longer and they are more easily gathered. They succeed best in a warm sandy loam which has been enriched with well rotted manure. If poles are used they should be set three to four feet apart each way. After the ground has become warm and dry, plant 4 to 6 beans to a pole and when well started thin out to 2 or 3 plants to a pole. By placing the seed eyes down they will germinate more quickly and for this reason are less liable to rot. Cultivate frequently but shallow.

Early Leviathan The Early Leviathan stands supreme because of its combined qualities, earliness, size and productiveness. The large, well filled pods are borne in clusters of five to ten and are spaced over the entire vine. They are well filled with large fleshy beans of excellent quality, delicate pale green in color.

Carpinteria A very desirable pole lima for the home and market garden, producing an abundance of large four-seeded medium green pods. The color is distinctive in having a decided greenish tint, an indication of very finest quality. The beans are thin skinned, delicious flavor and retain the distinctly green tinge even when dried.

Ideal One of the largest and most valuable of the medium late varieties, producing a tremendous crop of seven-inch pods, which are filled with five to six large beans of excellent quality. Seed large, ovid, flat white with slight greenish tinge. Splendid for market gardeners.

King of the Garden This is the best and most popular main crop variety. Vines are strong and vigorous; setting pods early and continuing to bear until frost. Is used extensively by market gardeners because of its very prolific nature and the immense size of the pods, which are very straight and handsome; of medium dark green color, broad, flat and filled with four or five large white beans of finest quality.

Challenger or Dreer's Pole Vigorous, productive, and quite early, producing pods which are much thicker than any other sort and filled with four thick beans so closely set that the ends are flattened. A favorite among market gardeners.

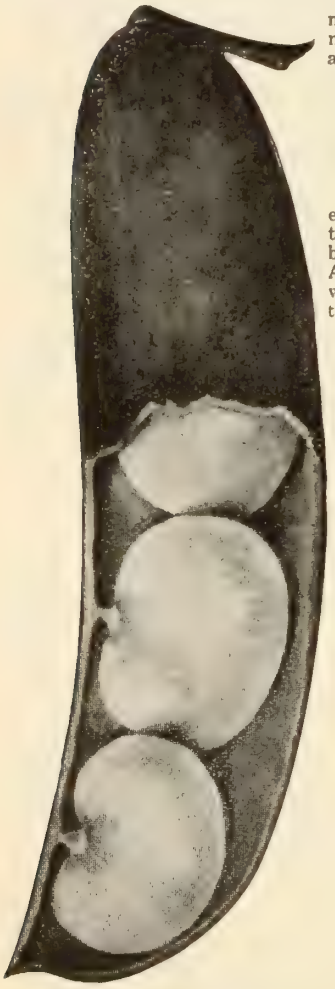
Early Leviathan

Giant Podded The largest podded lima in cultivation; extremely vigorous in growth, mid-season. Pods are borne in clusters of 6 to 8 and measure 7 inches long and 1½ inches broad. The beans are extra large and of excellent quality.

BUSH LIMA BEANS

Large seeded sorts, 1 qt. to 100 hills; 1 bu. to the acre.
Small seeded sorts, 1 qt. to 150 hills; 3 pks. to the acre.

These varieties require no support, are about two weeks earlier than the pole beans, and can be planted closer in the rows. They are therefore used by large growers and by gardeners who do not find it convenient to use poles. After danger of frost is past and the ground has become warm, plant in 3 foot rows dropping 3 seeds to a hill and the hills 15 inches apart.



Early Giant Bush

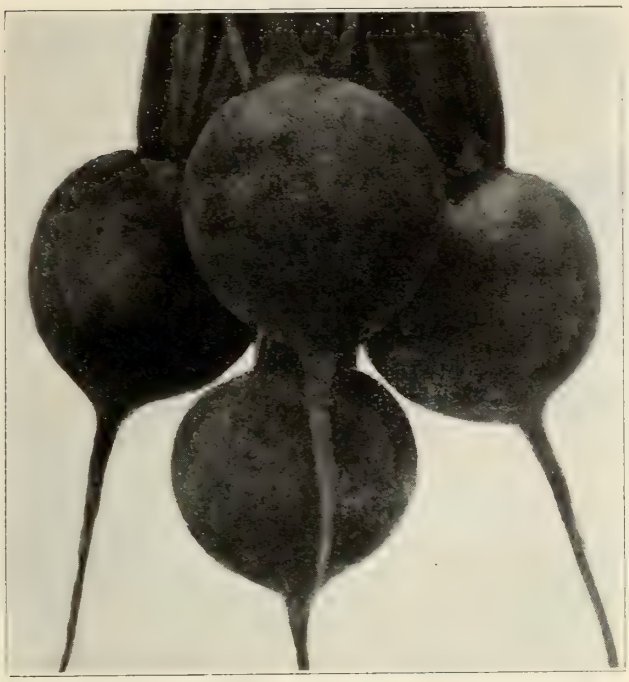
Early Giant Bush Lima The largest and earliest bush lima; two weeks earlier than Fordhook, very prolific and of excellent quality. Pods contain 4 to 5 large, close setting beans, and are borne in clusters of 5 to 8. Plant very vigorous and upright, often attaining a height of 30 inches.

Fordhook Bush Lima A most excellent variety and exceedingly popular with market gardeners. The plants are freely branching and very erect in their growth. Four or five large, very thick beans are contained in each pod and the plants continue to produce large quantities from July until frost. The green beans even when full size are tender, juicy and sweet when cooked.

Burpee's Improved Bush Lima A very prolific mid-season variety of very hardy, vigorous and true bush growth, bearing clusters of 5 to 8 pods measuring 5 to 6 inches long. The pods are borne abundantly, enormous in size and well filled with handsome beans which are both larger and thicker than those of the regular Burpee's Bush Lima.

Wood's Prolific or Henderson's Improved Bush Lima
A very early and vigorous type, producing an abundance of 3 to 4-inch pods; contain 4 small, flat, white beans of good quality.

BUSH LIMAS PRICES	Pt.	Qt.	Pk.	Bu.
Burpee's Improved Bush Lima	$ .20	$ .35	$2.50	$ 9.00
Early Giant Bush Lima	.25	.45	2.75	10.00
Fordhook Bush Lima	.25	.45	2.75	10.00
Wood's Prolific or Henderson's Improved Bush Lima	.20	.35	2.50	9.00
POLE LIMAS				
Carpinteria	.25	.45	2.75	10.00
Challenger or Dreer's Pole	.25	.50	3.50	12.00
Early Leviathan	.25	.45	2.75	10.00
Giant Podded Pole	.25	.45	2.75	10.00
Ideal	.25	.45	2.75	10.00
King of the Garden	.25	.45	2.75	10.00



Manns' New Ruby Gem

Manns' New Ruby Gem Is a beet of genuine quality and real beauty. As early as Crosbys Egyptian, extremely dark red and not a purple or brown root in the lot. The most critical produce buyer will be pleased with its intense color, perfect shape and freedom from zones. It has plenty of tops for bunching and while it is also an excellent canners variety it should not be confused with the various "all purpose" sorts developed mainly for packing house purposes.

BEETS—MANGEL (OR STOCK)

Sow 1 ounce to 100 feet of drill, 6 pounds to the acre in drills and 15 to 20 pounds to the acre is sown broadcast.

Mammoth Long Red Attains enormous size, producing thirty to fifty tons per acre. The roots are straight, well formed and much thicker than other sorts. Grows well above the ground and is therefore easily gathered. The flesh is white tinged with rose. Highest feeding qualities.

PRICES

BEETS	Pkt.	¼ Lb.	Lb.	10 Lbs.
Crimson Globe	$0.10	$0.25	$0.85	$7.50
Crosby's Egyptian—Dark	.10	.25	.75	6.50
Crosby's Egyptian—Light	.10	.25	.75	6.50
Detroit Dark Red	.10	.25	.75	6.50
Early Wonder (special)	.10	.25	.75	6.50
Edmand's Blood Turnip	.10	.25	.85	7.50
Extra Early Flat Egyptian	.10	.25	.75	6.50
Half Long Blood Red	.10	.25	.75	6.50
Lentz (Ex. Early Light Red)	.10	.25	.75	6.50
Little Egypt	.10	.30	1.00	8.50
Lutz Green Leaf (Dark Red)	.10	.25	.75	6.50
Mammoth Long Red	.10	.20	.60	5.00
Mann's Early Spring	.10	.35	1.00	8.50
New Model	.10	.25	.85	7.50
Nutting's Gem	.10	.25	.75	6.50
Perfected Detroit	.10	.25	.90	8.00
Ruby Gem	.10	.30	1.00	8.50

TABLE BEETS

1 ounce to 50 feet of drill; 5 pounds per acre.

The soil for beets should be light, rich, fine and deeply cultivated. Smooth beets cannot be grown if fresh manure is used. If wanted very early, sow in hot beds and transplant, cutting off the outer leaves. For early outdoor crop plant the seeds about 1 inch apart and 1 inch deep in rows 1 to 2 feet apart, firming the soil about the seeds by walking on the row. This should be done as soon as the ground can be worked and for table use, plantings should be made every three weeks. Thin out the plants to 3 inches apart. For main crop sow in the early part of May while for winter use they may be planted up to July 1st.

MANNS' BEET SEED

is grown from transplanted roots which have been carefully selected as to both interior and exterior color, tops, shape and uniformity of size. It could be grown much cheaper if we were supplying our trade just ordinary commercial beet seed. Superior seeds can only be grown from specially selected parent stocks.

Crosby's Egyptian Smooth, globe shaped, deep red in color, tender, sweet and richly palatable when served. This should not be confused with Flat Egyptian as it is similar only in point of earliness.

Detroit Dark Red Careful comparison with other prominent strains of this variety show that our stock is unsurpassed in quality and appearance. The tops are small and upright in growth and the roots are globular, of medium size, very smooth and of a wonderful dark red color throughout. Very desirable for canning.

Early Wonder Popular bunching variety in some sections where a light-colored beet is desired, and white zones are not objectionable.

Extra Early Flat Egyptian One of the very earliest, excellent for forcing and early crop. Roots are distinctly flat, very dark red, have very small tap root and are of fine quality when young. They measure 2 inches in diameter when mature and have very small tops.

Half Long Lentz Bright red outside, flesh pale pinkish white, sweet, about 2½ by about 4 inches top shaped.

Half Long Red or Lutz Green Leaf Five to six inches long, 2½ to 3½ inches diameter at shoulder, half long, top shaped, dark maroon red, flesh deep blood red.

Little Egypt Earlier, darker and more uniform than Extra Early Flat Egyptian, absolutely free from zoning, specially adapted for forcing, having short tops.

Manns' Early Spring Being extremely early, of a wonderful dark red color, and of exceptional quality, Manns' Early Spring Beet offers an unusual opportunity for profitable production.

New Model Perfect in shape and of a beautiful red color, very uniform in shape and size, the entire crop maturing during the same week. Forces well under glass. This variety fills a definite need among the market gardeners and has met with success. Practical growers realizing the superior quality of this strain are ordering in 25, 50 and 100-pound lots, using this one variety throughout the entire season.

BORECOLE

Scotch Kale

Extensively grown in this section for marketing during the winter months, when other vegetables are scarce. Borecole should be grown like cabbage, the seed being sown from early spring to the middle of August. It is customary to pull off the lower leaves and let the plant grow on to furnish a continuous supply.

Curled Perfection An improved type, specially rogued and developed from a privately held American stock. Well curled and of a wonderful dark green color; winters well and commands top prices.

Hardy Winter This variety is one of the most salable and profitable sorts for either the home or market gardener. The plant attains a height of 18 inches and produces an abundance of beautiful light green leaves, which are densely curled and crimped. It is extremely hardy and has the additional advantage of putting forth a second crop of leaves after the first have been gathered or have fallen off.

Superior Extra Curled Green Scotch The leaves of this variety are very much more curled than the Dwarf-Green Scotch, and many more bushels per acre can be cut due to the extremely vigorous growth, which is characteristic of this variety. Nearly as hardy as Hardy Winter, and very popular with many of our customers.

Borecole—Dwarf Green Scotch

Dwarf Green Scotch This excellent sort is low spreading and compact in its nature of growth, forming a mass of leaves which are beautifully curled and mosslike in appearance. The color is an attractive bright green and the quality is excellent.

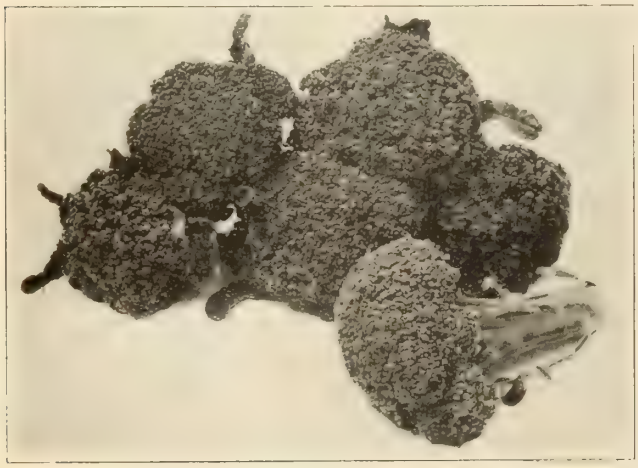
New Blue Curled Scotch Just as hardy as Hardy Winter and having very curly dark blue-green leaves.

BROCCOLI

Calabrese Green Sprouting or Heading

This plant is somewhat similar to cauliflower in its nature of growth, but produces a large solid head which remains green. When this head is cut, numerous sprouts develop, forming small heads which command a fancy price among Italian trade. It is rapidly becoming popular and is being generally used in leading hotels because of its delicious, rich asparagus flavor.

Italian Green Sprouting (Turnip Salad Broccoli.) Known in the South as Salad Broccoli, grows more "greens" than seven top turnip and is fairly hardy in Maryland, making a profitable cover crop. Sow in August broadcasting two to three pounds per acre and the first sprouts will be ready for market during February or early March, at which time they usually command a very good price.



Broccoli Calabrese Heading

BRUSSELS SPROUTS

1 oz. will sow 500 ft. of drills or 3,000 plants.

Sow in April for early crop or in early June for a late fall crop. Transplant to rows which are 3 to 4 feet apart, 18 to 24 inches apart in the rows. Will live through the winter without protection.

Danish Prize Found to be the best variety both in quality and productiveness. The sprouts develop very evenly over the entire stem, the lower sprouts being as tightly folded and as solid as those higher up.

COLLARDS

Georgia, Southern or Creole The chief Southern variety for greens, growing 2 to 3 feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. One ounce of seed will sow 300 feet of drill; two pounds per acre.

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
BORECOLE				
Curled Perfection	$0.10	$0.15	$0.25	$0.85
Dwarf Green Scotch	.10		.25	.75
Hardy Winter	.10	.15	.40	1.25
New Blue Curled Scotch	.10		.25	.75
Superior Extra Curled	.10	.15	.30	1.00
BROCCOLI	Pkt.	Oz.	¼ Lb.	Lb.
Calabrese Green Sprouting or Heading	$ .10	$ .25	$ .75	$2.75
Italian Green Sprouting	.10	.15	.40	1.25
BRUSSELS SPROUTS				
Danish Prize	.10	.20	.60	2.25
COLLARDS				
Georgia, Southern or Creole	.10		.20	.60
Cabbage Collards	.10		.20	.60

CARROTS

1 ounce to 150 feet of drill; 4 pounds per acre.

Our stock is grown from choice selected and transplanted roots only, and are of the truest type and richest color money can procure.

CULTURE.—Any good soil will grow this vegetable, but the most perfect roots, however, are developed in rich, friable soil, preferably sandy loam. The flavor and tenderness of the table varieties is secured by having a quick growth, which usually means good growing weather and proper cultivation. Sow as early as the ground can be worked or for late crop until the latter part of July, in drills 15 to 18 inches apart, finally thinning the plants to 3 to 4 inches in the drills. The seed is slow to germinate and if sown early or on moist soil, half an inch is deep enough. When sown during the hot summer months it is well to protect the seed bed with a thin layer of chips or straw as excessive heat will kill the vitality of the seeds before they germinate. After the seed has sprouted remove the covering, selecting the late afternoon for this work. Carrots are usually quite free from pests and diseases. The usual danger from ground worms and slugs is of course always prevalent, but once up they are easier to grow than most vegetables. They are ready for table use in about two months.

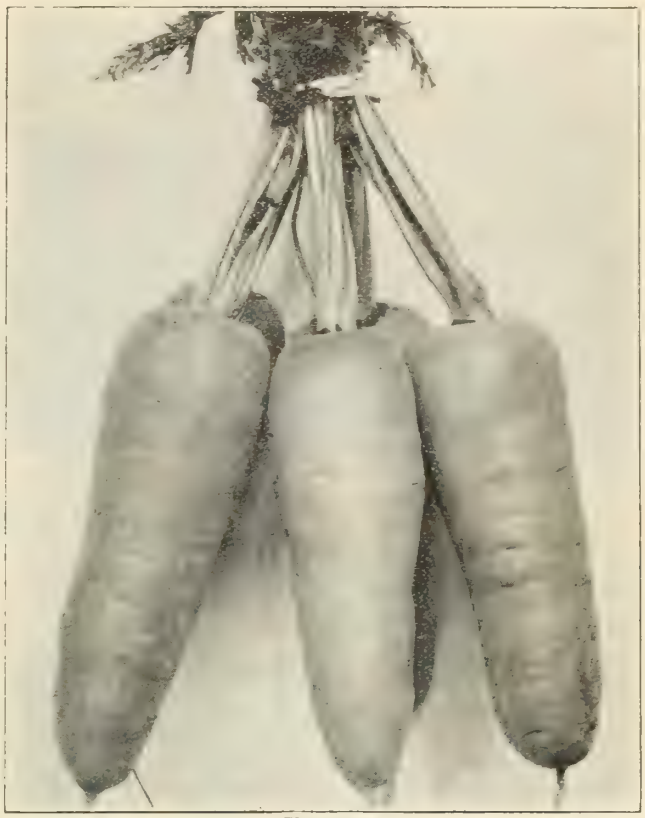
California Bunching

Chantenay or Model Carrot A most excellent, medium early, half-long variety. Very uniform, stump-rooted but tapering slightly. They are smooth, deep orange-red in color and the flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any, and will also prove very satisfactory if grown for winter use. Very easily harvested and bunched.

New Chantenay Produced from individual root selected stock, therefore a great improvement in uniformity of size and shape. The principal feature of this new strain, however, is its deep solid color.

Oxheart or Guerande Very stout and thick, ending in an abrupt small tap root, easily harvested and can be grown in very shallow soils where other sorts would not thrive. Quality excellent.

California Bunching



Chantenay

Sunrise This variety has become a favorite with our market garden trade because of its fine quality, perfect shape and attractive color. Sunrise has been found to be specially valuable for medium and late use, an excellent keeper and thoroughly dependable. It is of most perfect form, pointed-rooted, with a broad, high shoulder. For main planting this sort has no superior, and when sown during June may be depended upon to produce the very best crop of roots to store for winter.

Danvers Half Long This is an exceptionally fine Carrot for private and market garden use. It is slightly longer than Chantenay and our strain produces uniformly smooth and evenly sized roots of handsome appearance. They are orange-red in color and the flesh is sweet, crisp and tender.

Imperator or Tendersweet

Coreless or Scarlet Nantes The earliest of its type; size and shape uniform; bright orange in color; smooth skin; small top.

Improved Long Orange A standard late variety, beautiful and uniform in shape, deep orange in color. The roots grow to a length of 12 inches and are of good quality for table use as well as for stock. They require a deep soil and if full size roots are wanted they should stand at least 8 inches apart in 18-inch rows.

PRICES

Variety	Pkt.	¼ Lb.	Lb.	10 Lbs.
California Bunching	$0.10	$0.30	$1.00	$8.50
Chantenay or Model Carrot	.10	.25	.75	6.50
Danvers Half Long	.10	.25	.75	6.50
Early Horn	.10	.30	.90	8.00
Imperator	.10	.30	.85	7.50
Improved Long Orange	.10	.30	.90	8.00
Nantes Improved Coreless	.10	.30	1.00	8.50
New Chantenay (Red Cored)	.10	.25	.75	6.50
Oxheart or Guerande	.10	.30	.90	8.00
Red Cored Danvers	.10	.30	.85	7.50
Rubicon	.10	.30	1.00	8.50
Sunrise	.10	.30	1.00	8.50
Tendersweet	.10	.30	.85	7.50

Selected Heads of Golden Acre for Stock Seed Production

CABBAGE

1 oz. for 2,000 plants; ¼ lb. per acre.

Yellows Resistant Varieties marked *

CULTURE.—The best results are obtained from a well-drained, deep rich loam. The very early varieties should be sown about September 15th and in 4 or 5 weeks transplanted to coldframes, from which they are transplanted to open ground from March 15 to April 15. If this is not done the seed should be sown in hotbeds in February; making plantings later of course according to variety and time crop is wanted. The earliest sorts should be set out in rows 2 feet apart and 18 inches apart in the rows.

If it is not especially desired to have early cabbage the seed may be sown in open ground and transplanted after 4 weeks. For second early crops sow in April and transplant in May; these will mature in July and August. The later varieties should be planted in May and transplanted in July to rows 3 feet apart and 2 feet apart in the rows; these will mature from September to November.

FIRST EARLY SORTS

Extra Early Express Earlier than Jersey Wakefield, smaller and less compact, but often a very profitable crop.

New Selected Jersey Wakefield An improved strain of Early Jersey Wakefield, grown and selected with the greatest care; there is none better. Plant compact and erect or very slightly spreading, with few outer leaves, which are smooth, thick, nearly oval and light green. Stem short. Heads of medium size, very solid, uniformly pointed and of excellent quality.

****Jersey Queen*** The yellows resistant Jersey Wakefield.

Charleston or Large Wakefield Produces larger and less pointed heads than Jersey and a week or two later in maturity.

Golden Acre Matures earlier than Jersey Wakefield, forming a large round, solid head resembling Copenhagen Market; very uniform, and compact, having few outer leaves which permits close planting. Golden Acre commands very high prices.

Copenhagen Market This very fine, large round headed variety is of Danish origin and has proven to be very valuable to the American grower. It is nearly as early as Jersey Wakefield. The heads average about 10 pounds, and the stems are very short.

****Marion Market*** Yellows resistant Copenhagen.

New Leader Very early flat heading sort forming small solid heads, very early but developing larger heads if allowed to stand.

Glory of Enkhuizen Large sure heading, dark green variety, globular, very hard and solid, few outer leaves, excellent quality

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
Charleston or Large Wakefield	$ .10	$ .20	$ .75	$2.50
Copenhagen Market	.10	.20	.75	2.50
Extra Early Express	.10	.20	.60	2.00
Glory of Enkhuizen	.10	.20	.65	2.25
Golden Acre (Original)	.10	.25	.75	2.50
Jersey Wakefield (New Selec'd)	.10	.20	.75	2.50
New Leader	.10	.20	.75	2.50
Yellows Resistant Varieties				
Jersey Queen	.10	.25	.85	3.00
Marion Market	.10	.50	1.50	5.50

*YELLOWS RESISTANT VARIETIES—The State of Wisconsin and several other State Departments of Agriculture have for a number of years been working on the best commercial cabbage varieties, adapting them to resist yellows or wilt. It is now possible with these resistant stocks to grow cabbage successfully even on diseased land, by sowing seed which is grown under special conditions to make it resistant. While the cost of this seed is somewhat higher than non-resistant seed, there is the added advantage of securing stock which has been reselected for conformity to true type and heading quality. Therefore these improved varieties are most desirable for both diseased and clean ground.

New Selected Jersey Wakefield

CABBAGE

SECOND EARLY SORTS

Volga One of the earliest main crop cabbages of superior quality. Very desirable where a large, uniformly round head with short stem and compact growth is wanted. Sure to produce a crop under difficult conditions, good keeper.

All Head Early or New Early Remarkably solid and uniform in color as well as in shape and size, its sure heading qualities and tenderness make it a favorite for the home garden. By reason of its compact growth, it is possible to produce 1,000 more heads per acre than many other good sized varieties. For winter use sow in July. Splendid sort for kraut making.

Early Flat Dutch Excellent large early flat sort, producing solid heads that mature with Early Summer. The stem is short and it has comparatively few outer leaves. Compares favorably with Large Late Flat Dutch but much earlier and smaller.

American Drumhead Savoy This is the finest of the Savoy class and very distinct from all other sorts. It forms the hardest heads and is the best for either early or late crops. The leaves are heavily crimped or savoyed and grow closely about the large, solid, dark green heads. The flavor is far superior to that of other cabbages, and for this reason is very much in demand. It is an excellent keeper and very hardy. Entire "pits" of it will keep in perfect condition until May.

New Danish Round Head Compared with Danish Ball Head, has less outer foliage. The heads are larger in size and are set on shorter stalks, maturing two weeks earlier. They are extremely solid, of sweet flavor and tender texture.

Henderson's Succession The best very large midseason cabbage, about a week later than Early Summer but much larger and can be planted closer because of its compact growth. It is sure to head, very uniform in habit and the quality is excellent.

All Seasons A reliable variety to use when only one planting of cabbage is made. It is equally as good for fall and winter as for summer use. Nearly as early as Early Summer and much larger heads of the best quality are produced.

****Wisconsin All Seasons*** Yellows resistant, all seasons.

Sure Head Extremely popular with the private gardener because of the sure heading qualities and the remarkably large, uniform, heavy heads. A good keeper and one of the best for late crops.

Danish Ball Head or Hollander A very hardy sure heading, heavy variety, which has proven to be the best keeper and the most desirable for distant markets. Exceedingly hardy and standing dry weather very well.

****Wisconsin Hollander Yellows Resistant*** A disease resistant strain of the Danish ball head type, very large, hard, sure heading.

Golden Acre

American Drumhead Savoy

LATE OR WINTER SORTS

Pointed Head Winter Sow the seed in time to set out plants first week in August. Dependable header, very solid, of fine quality, excellent keeper and shipper. Stands temperatures down to 24 degrees. Ready for market earlier than the Southern crop.

Houser Very popular with large cabbage growers in Pennsylvania. An extremely large, late sort, producing very hard round heads.

Premium Flat Dutch A very good variety for fall use or for making kraut. The heads are very solid, tender and of superior quality. They mature earlier than other late varieties but do not keep as well over the winter.

Extra Large Late Flat Dutch The best and most profitable late variety, possessing all the qualities a winter variety should have. It is hardy, vigorous, and high in quality. The heads are "as solid as a stone" and for that reason keep well for winter use. A favorite with the private gardener as well as the trucker.

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
All Head Early or New Early	$ .10	$ .20	$ .60	$2.00
All Seasons	.10	.20	.60	2.00
American Drumhead Savoy	.10	.20	.75	2.50
Autumn King or World Beater	.10	.20	.60	2.00
Danish Ball Head or Hollander	.10	.20	.60	2.00
Early Flat Dutch	.10	.20	.60	2.00
Early Summer	.10	.20	.60	2.00
Eureka First Early	.10	.20	.60	2.00
Extra Large Late Flat Dutch	.10	.20	.60	1.75
Henderson's Succession	.10	.20	.60	2.00
Houser	.10	.25	.75	2.50
Mammoth Rock Red	.10	.25	.85	3.00
New Danish Round Head	.10	.25	.75	2.50
Pointed Head Winter	.10	.20	.65	2.25
Premium Flat Dutch	.10	.20	.60	1.75
Sure Head	.10	.20	.60	2.00
Volga	.10	.20	.60	2.00
Yellows Resistant Varieties	Pkt.	Oz.	¼ Lb.	Lb.
All Head Select	.10	.35	1.15	4.00
Globe (Resistant Glory)	.10	.35	1.15	4.00
Wisconsin All Seasons	.10	.25	1.00	3.50
Wisconsin Hollander	.10	.25	1.00	3.50

Early Snowball Cauliflower

CAULIFLOWER

1 ounce to 2,000 plants.

For an early crop sow the seed either indoors or in a hot-bed in January or February, transplanting them to 2 or 3 inches apart, thus allowing the plants to put forth a vigorous growth before being set in the permanent rows.

As soon as danger of freezing is over, set the plants in the open ground in rows 2½ to 3 feet apart and 18 inches apart in the row. Cultivate often and thoroughly. For fall crop sow the seeds during April or May. It is well to plan so that the early crop heads before very hot weather and the late crop matures after hot weather.

Early Snowball The best early variety in cultivation. If planted March 1st, large heads will be produced early in June, and scarcely a single plant will fail to form a head.

Dry Weather Cauliflower Especially adapted for growing in dry locations where other varieties fail. Easily blanched and remains fit for use for a long time.

Cauliflower Plants SEE PAGE 39.

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
Chinese Cabbage				
Pe-Tsai Wong-Bok	$0.10	$0.15	$0.50	$1.50
Improved Pekin—Chihli	..	.20	.60	2.00
Cauliflower				
Dry Weather Cauliflower	.25	1.25	4.50	17.50
Early Snowball	.25	1.25	4.50	17.50
Cardoon				
Smooth White Solid	.10	.25	.75	2.75
Celeriac				
Large Smooth Prague	.10	.20	.50	1.75
Cress				
American Upland	.10	..	.30	1.00
True Water	.10	.40	..	...
Chicory				
Ciccoria Catalogna (Radichetta)	.10	.25	.75	2.25
Witloof	.10	.15	.45	1.50
Large Rooted or Common	.10	.15	.35	1.25

CHINESE CABBAGE

Chinese or Celery Cabbage belongs to the cabbage family but more closely resembles lettuce. For best results plant the seed late in July or very early in August as spring plantings in this section are liable to bolt to seed. Plant the seed in the permanent bed and thin out to stand 12 to 15 inches apart.

Pe-Tsai Wong-Bok The finest Chinese Cabbage in existence. The heads are large, compact and the crisp, tender interior blanches to a creamy white. It will stand long before bolting to seed and is not injured by light frosts.

Chinese or Celery Cabbage

CELERIAC

Sow seed and cultivate same as celery, with the exception that it is not necessary to blanch the plants. When the roots attain a diameter of two inches they are fit for use. To keep these through the winter, pack in damp earth or sand and store them in a cellar or leave them out of doors, covering with earth and straw for protection.

Large Smooth Prague One of the largest, very smooth and almost round with very few side roots. Plants are vigorous, with large dark green foliage.

CRESS

CURLED OR PEPPER GRASS

Sprinkle seed freely along shallow drills 1 foot apart at intervals through spring and summer, as desired.

American Upland This small salad is much used with lettuce.

True Water Thrives only when its roots and stems are submerged in water.

CHICORY

Witloof (French Endive)

A very choice winter salad, forced in hot-beds from roots; producing solid oblong heads blanched ivory white.

Large Smooth Prague Celeriac

Golden Phenomenal

CORN SALAD

1 ounce will sow 20 square feet; 6 pounds to the acre.

Ackersalad Large Seeded Dutch. A vegetable used as a salad. It is sown in the opening of spring in rows 1 foot apart, and is fit to use in 6 or 8 weeks from sowing. If wanted in early spring, sow in September; cover with straw as soon as cold weather sets in. Can be grown in cold frames, covered with straw mats or shutters, and used any time during the winter.

POP CORN

South American Giant Pops extremely large creamy white flakes. In greater demand than any other variety.

Variety	PRICES Pkt.	Oz.	¼ Lb.	Lb.
CELERY				
Columbia	$ .10	$ .20	$ .50	$1.75
Easy Bleacher	.10	.20	.60	2.00
French Golden Yellow	.10	.50	1.50	5.00
Giant Pascal (Special)	.10	.20	.75	2.50
Golden Heart	.10	.20	.50	1.75
Golden No. 14	.10	.30	1.00	3.50
Golden Phenomenal	.10	.30	1.00	3.50
Golden Plume	.10	.30	1.00	3.50
Golden Self-Blanching	.10	.35	.90	3.00
Manns' Golden (Special)	.10	.50	1.75	6.00
White Plume	.10	.25	.50	1.75
Winter Queen	.10	.20	.50	1.75
CORN SALAD				
Ackersalad	.10	.15	.40	1.25
POP CORN				
South American Giant (5 lbs., 50c)				.15

CELERY

1 ounce to 5,000 plants; 20,000 plants per acre.

Celery seed is very slow to germinate and therefore should be started indoors in boxes from February to April or sown out of doors in a finely prepared seed bed during April. See that the seed is not covered too deep and that the bed is kept moist, almost wet until the seeds germinate. When the plants are about two inches high thin out and transplant to a distance of two or three inches apart each way. These must be kept entirely free from weeds and when they are four inches high the tops may be cut off so that the plants will grow more stocky. The plants are usually set out in the permanent bed when five inches high and it is usually best to do this during July or the first of August. In some sections best results are obtained by transplanting in June.

The permanent beds should be thoroughly prepared and well enriched with rotted manure, which should be spaded in deeply, the rows being spaced 3 to 4 feet apart. Cut off some of the root and set the plants 8 to 12 inches apart in the rows, firming the soil tightly, and cultivate them frequently for a period of six weeks. Celery needs plenty of moisture.

When the plants are nearly full grown they should be blanched. This is done by drawing the soil closely about the plants to about two-thirds of their height, being careful not to allow any of the earth to fall between the leaves. Repeat this process every few days until only the top of the leaves are visible. Do not disturb the plants while they are wet or the soil is damp as this is liable to result in injury from rust.

Golden Plume This new strain of Golden Self-Blanching has been pronounced by authorities to be the best of all the early varieties. It matures two or three weeks earlier than any other sort, blanches more quickly and shows less tendency to blight or crown-rot. Distinctly larger and ranker in growth than Golden Self-Blanching; more plainly ribbed and does not grow hollow. The crisp, tender stalks are very broad and the large full plumed centers are displayed to advantage.

Manns' Golden (Special) See page 4.

French Golden Yellow Self-Blanching (Originator's Stock.) Our strain of this very popular sort cannot be excelled in quality or appearance. The plants are of medium size, compact and stocky, with yellowish green foliage. The stalks are solid, crisp, tender, free from strings and of a fine nutty flavor.

Easy Bleacher Two weeks later than Golden Self-Blanching. Blanches readily and is a great favorite with Southern growers who usually plant a full crop of this one sort. Vigorous in growth and a splendid keeper.

Winter Queen Of medium height, an excellent winter keeping sort, producing thick creamy white stalks which are broad, very solid and crisp. The hearts are large and it blanches well.

Golden Heart A distinct variety of sturdy dwarf habit. It is solid, and an excellent keeper, and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making it exceedingly showy and desirable for either market or private use.

Columbia An exceptionally fine, early variety. The plant is of medium height, but very stocky, foliage is a light shade of green with yellow tinge, and the stalks are thick, almost round, and resemble Giant Pascal in shape, but are of a rich, yellow color.

Giant Pascal A superior keeping sort. The stalks are very large, thick, solid, crisp and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time.

CELERY PLANTS

All Leading Varieties

Ready During July and August

SEE PAGE 39

USE A
FELINS VEGETABLE TYING MACHINE

Manns' No. 56—Note the low position of the ears, an evidence of extreme earliness.

CORN—Table Varieties

1 quart to 200 hills; 1 peck per acre.

Sugar Corn should not be planted until May, or when the ground is warm. For succession, plant about every two weeks until the last of July. All varieties may be either sown one inch deep in rows three to four feet apart, the seeds being placed about 8 inches apart in the rows, or they may be planted in hills at distances of three or four feet apart each way, allowing not more than 3 plants stand to a hill. The size of the variety and the richness of the soil should determine the distance of planting. Cultivate frequently and thoroughly but shallow until the tassels appear.

First Early Neck This variety can be planted earlier than any other sort; ear short, grain white. It is not a Sugar Corn.

Delicious Truckers Favorite A 70-day sweet dent variety; ears 8 to 10 inches long having 12 to 16 rows.

Improved Early Adams A distinct improvement over the Old Early Adams, fully as hardy; ears measure from 10 to 14 inches in length, with 12 or more rows to the ear. Grains are narrow and deep, of excellent table quality.

Manns' No. 56 The best, largest, most saleable early market corn we have ever known. It can be planted extremely early without danger of rotting, which makes it possible to produce marketable ears at least five weeks ahead of Stowell's Evergreen. Resembles sugar corn, an excellent shipper, and a money maker.

Early Superior This new variety is of remarkable size considering its earliness. The ears are 8 inches long and have 16 to 20 rows of rather narrow deep grains. The quality is excellent and the attractive appearance of the rich, tender, well-filled ears make it a very desirable sort for the Market Gardener.

Red Cob or Ninety-Day Corn A distinct sort of white Corn; matures in about 90 days; produces large, handsome ears. It can be used green as a table corn or when dry for stock feeding.

Country Gentleman Very deep grains, small cob and exceedingly rich flavor. Often produces 3 to 4 ears to the stalk. The grains are "staggered" on the cob, leaving no signs of rows.

Long Island Beauty The largest of all sweet varieties. It is ready for market in 85 days and has 14 to 16 rows of fairly deep grains.

Stowell's Evergreen Extra Selected Grown more extensively than any other; a favorite with canners and market gardeners for late use. Ears of large size, kernels very deep, tender and sugary; very productive and remains for a long time in fit condition for table use.

Howling Mob Stalks are of strong, vigorous growth, 5 feet in height; produces 2 large ears of sweetest quality.

Early Evergreen Ripens 10 to 12 days in advance of Stowell's Evergreen, and is equally as good in quality. Kernels sweet and tender; cob small, with irregular rows.

Golden Colonel The new golden yellow corn, resembling Country Gentleman or Shoe Peg in size and formation of kernels, equal if not superior in quality.

White Evergreen A pure white strain of the popular Stowell's Evergreen. The ears are very large and well filled from butt to tip with long, slender, pure white grains.

GROW HYBRIDIZED VARIETIES OF CORN

The increased cost is only about $2.00 more per acre, but the yield is increased 25% more. Practically all of the larger canning companies are now planting Hybrid Corn because of the certainty of a better yield and much better quality. It is important, however, to plant only seed grown by an expert hybridist as hybrid corn is not necessarily all desirable. The process is expensive, highly technical and requires the skill of a plant breeder. Buy Manns' hybridized corn; it has been grown by experts.

Please Note—It is useless to try to save seed from hybrid varieties of corn. They must be newly developed each year.

Golden Cross Bantam (Hybrid) Produces beautiful 8-inch ears having 10 to 14 rows of golden yellow kernels. It is resistant to wilt or Stewart's disease and is now the standard strain grown for the largest canners. As the crop matures at nearly the same time, it should be planted at intervals of a week or ten days to assure a continuous supply.

Stowell's Evergreen Hybrid So far superior to regular Stowell's Evergreen in yield, quality and appearance that it pays a much larger profit than the ordinary strains. The seed cost is about $3.00 per acre. Other costs, including cultivating, fertilizer, etc., are all the same for either type of corn, but the resulting crop will pay much larger profits. Plant Stowell's Hybrid, if only for a trial.

PRICES

Variety	Pt.	Qt.	Pk.	Bu.
Adams Early	$ .15	$ .25	$1.50	$5.50
Bardens Wonder Bantam	.15	.25	1.75	6.00
60 Day Yellow Bantam	.15	.25	1.75	6.00
Black Mexican	.15	.25	1.75	6.00
Burbank Bantam	.15	.25	1.75	6.00
Country Gentleman (Shoe Peg)	.15	.25	1.75	6.50
Delicious Trucker's Favorite	.15	.25	1.75	6.00
Early Evergreen	.15	.25	1.75	6.50
Early Superior	.15	.25	1.75	6.50
First Early Neck	.15	.25	1.50	5.50
Golden Bantam	.15	.25	1.75	6.50
Golden Colonel	.20	.40	2.50	9.00
Golden Evergreen	.20	.35	2.00	7.50
Howling Mob	.15	.25	1.75	6.50
Improved Early Adams	.15	.25	1.50	5.50
Late Mammoth	.15	.25	1.75	6.00
Long Island Beauty	.20	.35	2.00	7.00
Manns No. 56	.15	.35	2.00	7.50
Narrow Grain Evergreen	.15	.25	1.75	6.50
Red Cobb or 90 Day	.15	.25	1.50	5.50
Stowells Evergreen Ex. Selected	.15	.25	1.75	6.50
Trucker's Favorite	.15	.25	1.50	5.50
Whipples Early Yellow	.15	.25	1.50	5.50
Whipples Early White	.15	.25	1.75	6.50
White Evergreen	.15	.25	1.75	6.50

HYBRIDS

Golden Cross Bantam Hybrid	$ .35 per lb.
Stowells Evergreen Hybrid	.50 per lb.

FIELD CORN

The stock we offer has been especially grown and selected for seed purposes

PECK, 85 Cents; BUSHEL, $3.00

Clark's Early Smoky Dent This new introduction has been developed by one of the largest and most reliable growers of corn in this country. Early Smoky Dent is today the earliest Dent Corn in cultivation, maturing in 75 to 80 days; is a good yielder and entirely free from disease; grows strong, quick, and has splendid 7 to 8 foot fodder.

Golden West This variety will yield a larger crop than any other yellow corn in existence. It is vigorous in growth, very deeply rooted and produces broad-leaved stalks of medium height. It is most attractive in appearance, and the ears usually have 18 to 20 rows of large kernels which are tightly wedged to make a solid ear. It requires about 100 days to mature and deserves the attention of any grower who wants a big crop of fine quality yellow corn.

Pride of the North Maturing perfectly in 90 days and being very hardy and prolific. Pride of the North has become a favorite among Northern growers and planters needing a 90-day yellow variety. The ears are of medium size with very small red cob. The kernels are closely set, long and compact.

Leaming Improved Dent A very popular and extremely productive variety. On good lands the stalks grow tall, producing two good ears to each stalk. The ears are long, with small red cob well filled with grains of medium size, but deep, of a rich golden color. It ripens with us in from 100 to 110 days and makes a good crop.

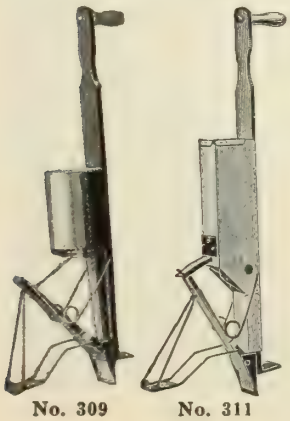
Iowa Silver Mine The National White Corn. A remarkable drought resister and under adverse conditions seems to pull through and make a crop where other varieties fail. Silver Mine is deep grained, pure white, rough-topped, with a small, white cob. Ears run from 9 to 12 inches long, with 16 to 20 rows of pure white kernels. Stalks medium height, very leafy, with broad blades, frequently bearing two ears weighing 1 to 1½ pounds each. Iowa Silver Mine has probably taken as many sweepstakes and first premiums as any corn in existence.

Iowa Gold Mine With the expert farmer Gold Mine is known as medium early, between the 110 day and the extra sorts that mature in 85 days. It is a great producer and sure cropper. Ears are medium symmetrical. Color bright golden yellow. The grain is deep and the cob is small.

Improved Maryland Yellow Dent A cross with the Golden West and Maryland Yellow Dent, both well known varieties. Ears measure 12 to 15 inches in length with 14 to 18 rows of very deep grains closely placed on the cob. The strain has been fully established and will mean larger and more profitable crops to the grower.

Golden Beauty It is a large and broad-grained yellow corn. The ears of perfect shape with from ten to fourteen straight rows of grains. The cob is very small.

Use CROW REPELLENT and do less replanting.
$1 size treats one Bushel.



No. 309 No. 311

No. 311—Acme Segment Corn Planter

Automatic slide type, adjustable for number of Kernels and depth of planting. Has Chinese bristle brush cut-off. Can be used for beans. $2.00.

No. 309—Acme Rotary Automatic Corn Planter

Full rotary Drop; having adjustable cast disk or seed plates, and depth gauge. Extremely accurate; also plants beans and peas. $2.50.

Golden West

Lancaster County Sure Crop A great favorite with dairymen as a silage variety and also extremely valuable as a husking sort. Yields large crops even under adverse weather and soil conditions. Matures for silage in 90 days and for grain in 100 days producing long ears of deep large yellow grains.

Ried's Yellow Dent Probably the most dependable cropper of all yellow varieties.

Boone County White Boone County is a very large white corn, something like Silver Mine, but larger and later in maturing. Ears well filled out at both ends, cylindrical, 9 to 11 inches long, averaging 20 rows, some 18 to 22. Grain very deep, a little rough. Cobs white, of medium size. Matures in 110 to 120 days.

Maryland White Dent An old standard variety and great favorite of every farmer who has grown it. The stalks are of a strong growth, bearing from one to two large ears, which have 10 to 12 rows to the cob. Grain is pure white and of fine quality.

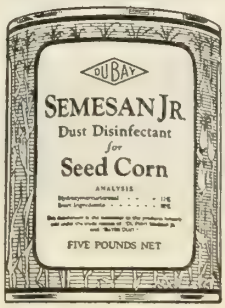
Improved Hickory King Largest grains of any white variety. Matures early and very productive. Ears set low, are of large size, well filled, very deep grained. It produces well, even on light land.

Cuban Giant Ensilage Well known as the leading variety for the production of fodder.

Pamunkey and Early Eureka Ensilage

Better Germination *and* Stand

LARGER YIELDS OF CORN *with* SEMESAN JR.



A simple, quick, inexpensive dust treatment with Semesan Jr. destroys harmful disease organisms on the seed, protects seed from rotting in cold, wet soil, controls seedling blight, reduces root and stalk rots, and generally increases crop yields. Harmless to seed corn. Does not slow up rate of drop. Only 2 ounces necessary per bushel of seed field or sweet corn. Costs only 2½c per acre.

PRICES

4-oz. New Improved	$ .35
1-lb. New Improved	1.00
5-lb. New Improved	4.75

Longfellow Cukes grown by Mr. Thos. Rohe

CUCUMBERS

1 ounce to 100 hills or 50 ft. of row; 2 lbs. per acre.

CULTURE.—Plant as soon as the weather becomes settled in hills 4 feet apart each way, with 8 or 10 seeds in each hill, cover half an inch deep, smoothing the hill off with the hoe. Keep the soil well stirred, and when the plants are out of danger of insects, leave 3 or 4 plants to the hill. For pickles, plant from the first of June to the first of August. The fruit should be gathered when large enough, whether required for use or not, for if left to ripen on the vines, it destroys their productive uses.

New Dark Evergreen Retains its very dark green color for an exceptionally long period. Very prolific, of medium size, a wonderful shipper and a profitable market garden variety, as it is one of the very earliest of its type.

Klondike A favorite with market gardeners and shippers all over the country. The handsome dark green cucumbers average 7 inches long and 2 inches in diameter.

Early Fortune One of the best of the very desirable "White Spine" type. It was selected out of a field of Davis Perfect by reason of its outstanding qualities and the strain has now become so well established that large plantings do not show any variation either in plant or fruit. Early, very productive, and having unusual disease-resisting ability. Fruits are 8 inches long with very dark green skin and thick, firm flesh which is crisp and tender. Excellent shipper.

Long Green (Improved) Our carefully-selected strain, under favorable conditions, produces fruit averaging from 12 to 16 inches in length. Skin is a deep rich green, flesh solid, crisp and of excellent quality.

Japanese Climbing Vines are extra strong, vigorous; being a climbing sort, can be grown on trellises, etc.; valuable in small gardens. Very prolific, from 40 to 50 having been counted on single plants. Fruit long, round, of fine flavor.

Longfellow or Straight Pack This new variety was developed primarily for greenhouse culture; its quality, size and attractive appearance, however, have definitely established it as one of the best for outdoor production. The beautiful dark green cucumbers average 12 inches in length and are adaptable for packing in flats for the very highest class trade.

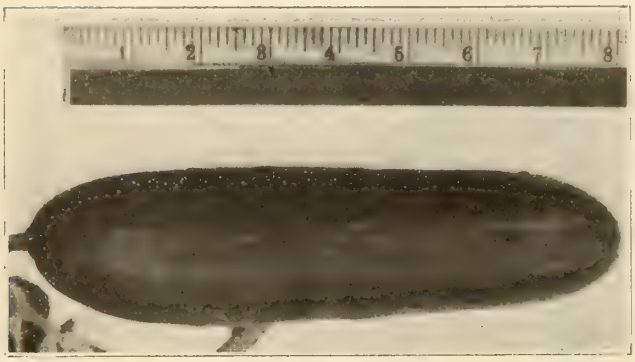
Clark's Special Profitable variety for Market Gardeners; 8½ to 10 inches long by 2½ inches in diameter, slightly tapered at the ends; very dark green, crisp and firm retaining its fine quality and handsome appearance even when shipped long distances.

Davis' Perfect As now selected, this popular new variety is well worthy of praise. The long, even fruits are of fine form, with an intensely dark rich green skin. With very few seeds, the solid white flesh is of superb quality for slicing. The vines are of strong growth and quite prolific.

Gherkins or Burr Very small, quite distinct from all others. It is grown exclusively for pickling, and should be picked when young and tender.

Straight 8 An "All American" Gold Medal Winner, producing symmetrial fruits, well rounded at both ends. Regularly eight inches in length and from 1¾ to 2 inches in diameter, deep green and free from pale striping and tipping. Vines are vigorous and remarkably productive.

Davis Perfect



"Straight 8"

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
Boston Pickling or Green Prolific	.10	.15	.30	1.00
Clark's Special (Original)	.10	.15	.30	1.00
Davis' Perfect	.10	.15	.30	1.00
Early Fortune	.10	.15	.30	.90
Evergreen Long White Spine	.10	.15	.30	.90
Gherkins or Burr	.10	.15	.40	1.50
Japanese Climbing	.10	.15	.40	1.50
Jersey Pickle	.10	.15	.30	1.00
Klondike	.10	.15	.30	.90
Longfellow or Straight Pack	.10	.20	.50	1.75
Long Green (Improved)	.10	.15	.40	1.50
New Dark Evergreen	.10	.15	.25	.75
Straight 8	.10	.25	.45	1.50
Woodruff's Hybrid	.10	.15	.30	.90

EGG PLANT

1 ounce will produce 1,000 plants.

Sow in March in hotbeds, and transplant when 2 inches high into a second hotbed, or let them remain and thin out to 4 inches apart. When the weather becomes settled, transplant into the open ground 3 feet apart each way. Good culture is quite as important as good seed. Work the ground deep, make it rich with well-rotted manure and hoe often.

Mammoth Smooth Stem A decided improvement on the New York Large Purple in quality, size and beauty. The plants are large and vigorous, leaves of a light green shade, stem smooth, fruit large, oval, early and of a fine deep purple.

Black Beauty The most beautiful and earliest of all large Egg Plants.

Florida High Bush Very vigorous and productive; of upright growth holding the fruit well off the ground; color light purple of oblong shape.

New York Improved Purple Oval shaped, thornless, dark purple color, and rich flavor.

Black Beauty Egg Plant

CHIVES

Chives are a small hardy perennial plant, resembling the onion in appearance and growing in clusters. They are grown for the young leaves, which are produced freely from early in the spring and give a mild onion flavor to sausage, salads and various dishes.

SWISS CHARD

Plant the seeds the same as ordinary beet seeds but thin out at first to 6 inches apart, later to 1 foot apart. Ready for use in about 60 days.

Fordhook Giant The best Swiss Chard in cultivation, producing extremely large, heavily savoyed leaves of a beautiful glossy, very dark green color. The ribs average three inches broad and are pure white.

Swiss Chard—Fordhook Giant

DANDELION

Arlington Strain The best market garden strain, forming a tuft of large, stocky, thick-leaved plants, white-ribbed.

ENDIVE

1 ounce to 100 feet of drill, 3 pounds to the acre.

Ever White Curled Plants moderately dense; leaves coarser than those of the Green Curled, but the mid-rib is yellow and the leaves almost white.

Broad-leaved Batavian (Escarolle) Leaves broad and almost plain; color light green.

Green Curled This is the hardiest variety, and very desirable for the home and market garden. The deep green leaves are beautifully cut and curled, easily blanched, and become very crisp, tender and fine-flavored.

HERBS	Pkt.	Oz.	¼ Lb.
Anise	$ .10	$ .15	$ .40
Basil	.10	.15	.50
Caraway, lb., 75c	..	.10	.25
Coriander	.10	.15	.25
Dill, extra large, lb. 60c	.10	.10	.20
Fennel, Florence, lb. $1.50	.10	.15	.50
Fennel, Sweet, lb. $1.50	.10	.15	.50
Lavender	.10	.25	.75
Marjoram, sweet	.10	.25	.75
Rosemary	.10	.25	.75
Sage, lb. $2.00	.10	.20	.60
Summer Savory	.10	.20	.50
Thyme	.10	.25	.85

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
SWISS CHARD				
Fordhook Giant	$ .10	$ .15	$ .25	$ .75
Lucullus	.10		.25	.75
CHIVES	.10	.50	1.25	4.00
DANDELION				
Arlington Strain	.10	.40	1.50	5.00
Italian (Ciccoria Catalogna)	.10	.25	.75	2.25
EGG PLANT				
Black Beauty	.10	.30	1.00	3.50
Florida High Bush	.10	.30	1.00	3.50
New York Improved Purple	.10	.30	1.00	3.50
Long Italian	.10	.30	1.00	3.50
Mammoth Smooth Stem	.10	.30	1.00	3.50
ENDIVE				
Broad-leaved Batavian	.10	.15	.30	1.00
Ever White Curled	.10	.15	.30	1.00
Full Heart Batavian	.10	.15	.30	1.00
Green Curled	.10	.15	.30	1.00

May King

All Seasons One of the best all-head Lettuces, standing the hot sun to a remarkable degree, slow to seed. The outer leaves are a bright soft green; the finely-blanched inner leaves are a rich golden-yellow, tender and mild in flavor. The heads are broad and nearly flat at the top, they continue to increase in size for about two weeks after they are ready for use.

Baltimore Early Market In comparison with May King, it is earlier and free from the red tint; the outer leaves are a light green, with the entire head fully blanched to a rich buttery yellow tint, which makes it so attractive.

Big Boston This is a fine forcing variety for cold frames during the winter months, as it produces heads of very large size, often 12 inches or more across, and succeeds better in cooler temperature than most forcing strains. The large heads are beautifully blanched and of superior quality. It also heads well in the open ground during cool weather of spring and fall. Our seed is an extra selected strain of the true stock.

Black Seeded Big Boston In comparison with Big Boston, the leaves are a trifle smaller and rather lighter shade of green with less color on edges, producing larger solid heads, which are always tender and crisp, more compact and will stand shipping better. Excellent for forcing or growing in the open ground, spring or fall.

Earliest "Wayahead" Shows a remarkable combination of earliness, firm heading character, handsome appearance and fine quality.

New York or Wonderful

LETTUCE

1 ounce to 2,500 plants; 3 pounds per acre.

Lettuce to be at its best should be grown rapidly, hence the soil should be made as rich and friable as possible by liberal manuring and thorough preparation. For early crop sow in a seed-bed in September or October and protect through the winter with cold frames, which should be removed as soon as danger of severe freezing is past. Lettuce in the open ground will stand some freezing but is killed by prolonged frost or frequent freezing and thawing. The seed may also be sown in hotbeds in March, and the plants, if well hardened, may usually be set in the open ground in April, maturing a crop much earlier than complete open ground cultivation would produce. If, however, it is not convenient to get the plants started either in the fall or early spring in hotbeds, the seed may be sown in open ground from the middle of April until July, selecting varieties suitable for the season.

The plants should stand 8 to 10 inches apart in the rows, and the rows should be about 18 inches apart.

All-Heart Lettuce A very bright green and attractive variety. It forms large, solid heads, composed of thick, smooth, very tender leaves, the inner ones finely blanched and all of the finest quality. It remains a long time in head before running to seed.

Grand Rapids As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list, being of quick growth, hardy, little liable to rot and remaining in condition several days after being fit to cut. Forms a loose cluster of large, thin, bright green leaves, savoyed, finely crimped at edges. Will stand shipping long distances.

White Boston

PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
All-Heart Lettuce	$ .10	$ .15	$ .30	$1.00
All Seasons	.10	.15	.30	1.00
Baltimore Early Market	.10	.20	.50	1.50
Big Boston	.10	.15	.30	1.00
Black Seeded Big Boston	.10	.15	.40	1.25
Chicken (loose leaf)	.10	.15	.30	1.00
Cos, or Romaine, White Paris	.10	.15	.30	1.00
Cos, Extra Dark Green	.10	.15	.40	1.25
Earliest "Wayahead"	.10	.15	.40	1.25
Grand Rapids	.10	.15	.30	1.00
Hanson	.10	.15	.30	1.00
Iceberg	.10	.20	.50	1.50
Improved Mammoth Salamander	.10	.15	.30	1.00
Large White Loaf	.10	.15	.40	1.25
Manns' Defiance Summer	.10	.20	.60	2.00
May King	.10	.15	.30	1.00
New York or "Wonderful"	.10	.20	.50	1.50
New York—Special	.10	.20	.50	1.50
New York No. 515	.10	.20	.60	2.00
Tenderheart	.10	.20	.50	1.50
Unrivalled	.10	.15	.40	1.25
White Boston	.10	.20	.50	1.50

LETTUCE (Continued)

Manns' New York or Wonderful is used by the largest commercial growers

Hanson The plant is compact and forms a large, flat, cabbage-like head, and is so slow to form a seed stalk that it often fails to seed at all. Outer leaves bright green, with prominent light-colored veins; inner leaves white and usually curved and twisted at the base; very tender and sweet; a favorite variety for home use.

Iceberg SEE NEW YORK OR WONDERFUL.

Improved Mammoth Salamander Grand mammoth hard-heading Cabbage Lettuce. Plants 12 inches across with extra large, solid round heads that are particularly rich and buttery in flavor; always well blanched and tender. The inner leaves are beautifully white and curled like a fine Savoy Cabbage. Splendid for summer use, both for the home table and for market. Most highly recommended.

Manns' Defiance Summer This variety, introduced by us several years ago, has made a very eventful impression upon the grower, as well as the consumer. It forms handsome, solid heads of enormous size, which remain in good salable condition long after all others have gone to seed. The flavor is excellent; the leaves are beautiful light green. Very profitable for market gardeners.

May King Extremely early, compact cabbage or heading variety, forming very firm heads of medium size and excellent quality. Color light yellowish-green, tinged with reddish-brown when mature. Inner leaves blanch rich golden-yellow, very tender and buttery.

New York Special Matures 10 days to two weeks earlier than regular New York, is slightly smaller in size and somewhat lighter in color, heads harder and more uniform. It withstands heat best of any of the New York or Iceberg types.

New York or "Wonderful" This variety is also known as the famous "Iceberg" of California, truly a wonderful lettuce. Plants of extra large growth, producing heads of immense size. Inner portion is beautifully blanched and stands for a considerable time before running to seed. Outer leaves a deep, rich green.

New York No. 515 See Page 2.

Tuccorado Being of very vigorous and hardy nature, this variety is especially desirable for fall or early spring sowing. Large handsome heads, solid, crisp and of superb quality.

Unrivalled This lettuce might well be called an Improved Big Boston. Its usefulness and value are identically the same as Big Boston, but it is preferred by market gardeners because of its being a solid green color with no brownish tinge at the border of the leaves; its heads are larger and of better appearance than Big Boston.

White Boston A very light green type somewhat similar in size, shape and uses to Unrivalled and Big Boston. Entirely free from red edge and gaining in popularity among market gardeners.

COS, ROMAINE OR CELERY LETTUCE

Paris Self-Folding White Cos

Grows to very large size, producing long-pointed, compact bunches. The outer leaves are closely folded about the center and interior is well blanched.

Paris Cos Lettuce

Cos, Extra Dark Green Similar to White Paris but darker in color.

LETTUCE PLANTS

FRESH DAILY IN SEASON—See Page 39

Kale, Extra Curled—Long Standing

Monstrous Carentan Leek

Early White Vienna

KALE

(ALSO SEE BORECOLE, Page 8)

Broadcast, 2 to 3 pounds per acre; 1 ounce to 200 feet of drill.

The Kales are more hardy than Cabbage, and make excellent greens for winter and spring use. For early spring use, sow broadcast in September and protect during winter. It may also be sown in April or May for later use.

Extra Curled Long Standing An improvement on the well-known German Extra Curled Kale; beautifully curled, of strong, vigorous habit, perfectly hardy and slow-shooting to seed.

Extra Early Siberian Ready for cutting earlier in spring than Long Standing.

Spring Smooth Leaf or Hanover Salad Quick-growing, very hardy smooth leaf sort, tender when young.

MUSTARD

Fordhook Fancy Darker green and leaves more curled at the edges than any other sort.

Giant Southern Curled The largest variety, forming a mass of finely curled leaves; hardy and vigorous.

FENNEL

(FLORENCE)

(Finocchia) In great demand with Italian trade and deserves to be more generally used. The leaf stalks are clustered in a bulb-like formation, and when these are about 1½ inches wide, the plants should be hilled up to about half their height.

LEEK

1 ounce to 50 yards of drill.

Sow early in the spring in drills 1 inch deep and 12 inches apart, when about 6 inches high transplant into deep, rich soil, 5 inches apart; use a dibble and plant deeply, close to their leaves.

Large London Flag A favorite market variety, of enormous size, leaves large and broad; flavor mild and pleasant.

Monstrous Carentan OR SCOTCH CHAMPION. Of extra large size; the leaves are fan-shaped, of a dark green color; the edible stem is 6 to 8 inches long and 3 inches in diameter.

KOHLRABI

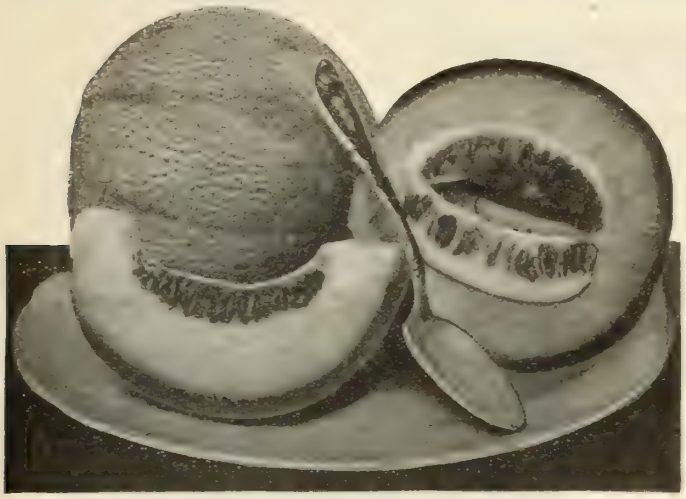
1 ounce will produce 1,500 plants.

This forms a bulb above the ground, and its flavor is somewhat similar to Cabbage. Sow in April in rows 18 inches apart, thinning out to 8 inches between the plants.

Early White Vienna Excellent for forcing and of fine quality. The bulbs grow to the size of an apple when ready for use, and are a pale whitish-green.

Triumph-Prague Extremely early forcing variety, winner in "All-American" trials.

PRICES				
Variety	Oz.	¼ Lb.	Lb.	10 lbs.
FENNEL				
Florence	$ .15	$ .50	$1.50	....
KALE				
Extra Curled Long Standing	..	.25	.75	$6.50
Siberian Kale (Extra Early)	..	.15	.35	3.00
Spring Smooth Leaf	.10	.15	.25	2.00
KOHLRABI				
Early White Vienna	.20	.50	1.50	...
Triumph-Prague	.25	.75	2.75	..
LEEK				
Large London Flag	.20	.60	2.00	.
Monstrous Carentan	.20	.60	2.00	...
MUSTARD				
Fordhook Fancy	.15	.20	.50	4.00
Giant Southern Curled	.15	.20	.50	4.00



Bottomly Cantaloupe

MUSKMELON

CANTALOUPE

1 ounce for 50 hills; 3 pounds per acre.

The most suitable soil for melons is a warm, sandy loam, well worked and enriched with rotted manure. After danger from frost is over, sow ten to twelve seeds to a hill, about 2 inches deep; the hills being six feet apart each way. When the plants have the second pair of leaves and danger from insects is past, thin out to four plants to a hill. Cultivate frequently, deeply away from the plants and shallow close to them. When hoeing, remove the crust from around the plants and replace with fine, loose soil.

GREEN FLESHED VARIETIES

Knight's Early Maryland An extremely early medium sized melon. Fruit oblong, showing the neck tendency; skin deep green, turning to golden at maturity, well covered with a close gray netting and distinctly ribbed; flesh fairly thick and very sweet; color medium green blending to light pink near the center. The earliest high quality melon and a good shipper.

Bottomly Is planted exclusively by the foremost cantaloupe growers of Anne Arundel County. The most exacting will be satisfied by the delicious quality while its appearance exhibits all the refinement of form, color and netting so necessary to a good melon.

Long John Somewhat similar in quality and appearance to Bottomly, but much larger and more elongated. Has green flesh and commands good prices in the Baltimore market.

Honey Ball Possess characteristics that make it one of the finest melons that has ever been offered to the grower, the shipper and the consumer. Exceedingly prolific, producing as many as fifteen to twenty large cantaloupes to the plant. Every commercial grower and home gardener should have at least a trial patch of Honey Ball.

Honey Dew A melon of the Cassaba type. The fruit is large, oval in form, about 10 inches long and 8 inches in diameter; thick flesh is light green in color, ripening to the rind, very tender, with an extreme sweetness. The vines are vigorous and set 6 to 10 melons to the hill. An excellent shipper, will keep for several weeks even when fully ripe.

Sweet Air An early, well netted medium sized, good quality and good shipping sort; grown largely in Southern Maryland.

Rocky Ford This has become one of the most popular of small or basket melons. The fruit is oval, slightly ribbed, densely covered with coarse netting. Flesh light green, very thick and highly flavored.

SALMON FLESHED VARIETIES

Early Imperial or Hale's Best. Thousands of acres of this vigorous and prolific variety are grown annually in the Imperial Valley of California for shipment to eastern markets, and being the very earliest of all high quality shipping melons, it should be grown extensively in Maryland and Virginia. The fruits average 7 inches long and 5 inches in diameter, are well netted and ribbed, and have very thick, salmon-tinted, fine grain flesh, which ripens clear to the rind. Its good, sweet flavor makes it equally desirable for the home garden.

Hale's Best See Early Imperial.

Burrell Gem Of sweet and aromatic flavor, oblong shape, smoothly rounded ends, closely netted and slightly ribbed dark green skin. Fruits average 6 inches long by 4 inches deep. Very fine for marketing.

Sugar Rock A valuable New Variety of a Distinct Type. Sweet as sugar and solid as a rock. Sells on sight and its marvelous flavor brings the buyers back for more. On account of its heavy netting and tough rind, can be thoroughly ripe before picking. A remarkable heavy yielder, and a real money maker.

CITRON

Red Seeded A small globular variety, striped and marbled with light green. Flesh white and solid; seeds red. Used exclusively for pickles and preserves.

PRICES

MUSKMELON	Pkt.	Oz.	¼ Lb.	Lb.
Banana	$ .10	$ .15	$ .35	$1.25
Bottomly	.10	.15	.30	1.00
Burrell Gem	.10	.15	.30	.90
Golden Honey Dew	.10	.20	.50	1.50
Hale's Best No. 36	.10	.15	.35	1.25
Honey Ball	.10	.15	.35	1.25
Honey Dew	.10	.15	.35	1.25
Hearts of Gold (Improved)	.10	.15	.30	1.00
Imperial	.10	.15	.30	1.00
Jasper	.10	.15	.35	1.25
Knight's Early Maryland	.10	.15	.30	1.00
Long John	.10	.20	.50	1.50
Pollock No. 10-25	.10	.15	.30	1.00
Rocky Ford	.10	.15	.25	.75
Schramm	.10	.15	.30	1.00
Sugar Rock	.10	.15	.40	1.25
Sweet Air	.10	.15	.40	1.25
CITRON				
Red Seeded	.10	.15	.35	.85

Imperial—Hale's Best

WATERMELON

1 ounce for 30 hills; 3 or 4 pounds per acre.

Cultivate exactly as for Cantaloupe, except that the hills should be 8 to 10 feet apart.

Dixie Queen A fine-flavored, early, 80-day round melon; skin striped dark green and greenish ivory, flesh bright red, solid and sweet. Shipped as White Seeded Cuban Queen.

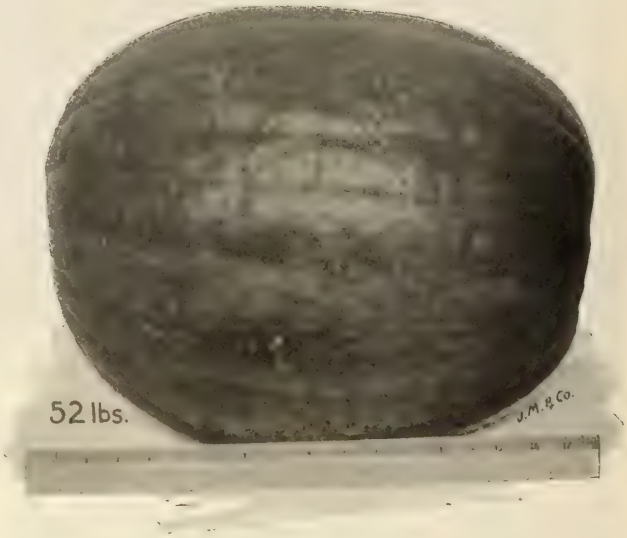
Kleckley's Sweet This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness.

Tom Watson A large long melon with dark green rind and light crimson flesh of excellent quality, and a splendid shipper.

Stone Mountain The outstanding introduction in the last few years. Its growth in popularity is phenomenal. Can be shipped long distances and its edible qualities are distinctly superior to any other shipping variety.

Sweetheart Large heavy fruits of oval or round form; skin very pale green, with distinct netted lines of a slightly darker shade. The solid flesh is a deep rich red, crisp and melting; its luscious quality has made it a leading favorite in the Eastern markets.

Irish Gray The color is a distinct mottled greenish gray; the flesh is red, sweet, crisp, and free from stringiness. An unusual melon, for although a good shipper it is equally fine for the home garden.



Stone Mountain

MUSHROOMS

Anyone with a fair understanding of the cultural requirements can grow Mushrooms successfully in any climate and in any season where the following conditions obtain:

1. Good spawn, procured from a reliable source.
2. A properly prepared bed with reasonable protection against weather extremes.
3. A temperature not greatly exceeding 60° F. nor much lower than 50° F.
4. A fairly moist temperature, avoiding the too frequent and direct application of water to the beds.
5. A gradual renewal of the air, avoiding draughts.

One brick will seed an area of 8 to 10 square feet. One quart bottle will seed an area of 35 to 40 square feet, depending on the size of piece planted. Full cultural directions free with purchase of spawn. **Bricks 30c ea., 10 bricks $2.75, bottle spawn $1.00 ea.**

OKRA OR GUMBO

10 pounds to the acre.

Sow in drills during April and May. Thin until plants are 12 inches distant, and draw earth to the stems for support.

Improved Dwarf Green Prolific or Density A distinct variety growing about 14 inches high. Grown in competition with the ordinary dwarf, it produces twice the number of pods, which are very smooth and beautiful.

White Velvet Pods are large, perfectly smooth.

Lady Finger Plants producing long, slender pods of pale green color.

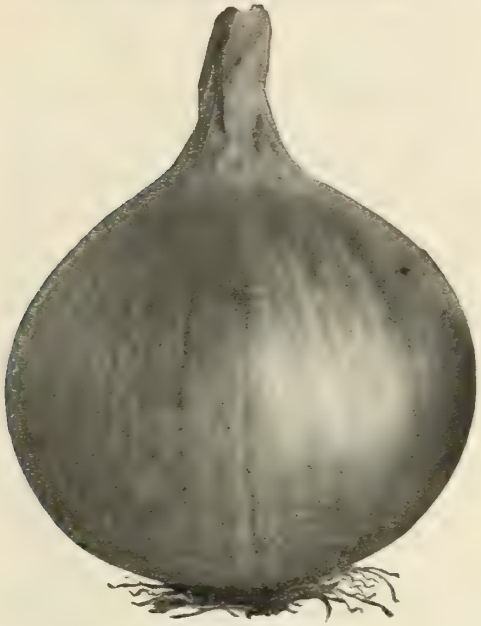
PRICES

WATERMELON	Pkt.	¼ Lb.	Lb.
Dixie Queen	$ .10	$ .35	$1.25
Florida Favorite	.10	.25	.75
Irish Gray	.10	.25	.75
Kleckley's Sweet	.10	.25	.75
Stone Mountain	.10	.25	.75
Sweetheart	.10	.25	.75
Tom Watson	.10	.25	.75
OKRA OR GUMBO			
Improved Dwarf Green Prolific	.10	.20	.50
Lady Finger	.10	.20	.50
Perkins' Mammoth Green Pod	.10	.20	.50
White Velvet	.10	.20	.50

Perkins' Mammoth Green Pod

A splendid variety. Very prolific, with slender long green pods of best quality and most desirable color for canning.

Okra



White Silver Skin Onion

ONIONS

To grow large bulbs 1 ounce to 100 feet of drill; 4 to 5 pounds to the acre.
To grow sets 10 ounces to 100 feet of drill; 50 pounds to the acre.

The Onion must have a clean and very rich soil. Use well rotted manure freely, and get the seed in as early as possible in the spring, no matter if it is cold and unpleasant. If onions do not get a good growth before hot, dry weather, the crop is sure to be a failure. Keep the soil mellow and clear of weeds. Sow in shallow drills, not less than a foot apart nor more than half an inch deep. As onions grow on top of the ground, they may be allowed to remain pretty thick, no matter if they crowd each other. In hoeing, destroy weeds and keep the ground mellow; do not cover the young bulbs with earth.

White Silver Skin, or Portugal This is the most popular variety of all white Onions; is almost exclusively used for growing sets. It is a good keeper. The bulbs grow to good size, ripening early and quite evenly. The flesh is mild and sweet, the thin skin a clear silvery white, of handsome appearance if the bulbs are gathered as soon as ripened and carefully dried under shelter away from the strong sunlight. When seed is sown at the rate of 20 to 25 pounds per acre, it makes bulbs of suitable size and most desirable for pickling.

White Pearl Very fine and very early variety. Bulbs when well grown are large, round, flattened, with a delicate pure white skin; flesh very mild in flavor. In the South this variety is largely planted for sets.

Mammoth Silver King The large bulbs are of attractive form, flattened, but quite thick through, with silvery white skin, frequently measuring 20 inches in circumference. It matures quite early, coming just after Onions grown from sets are gone Must be sown thinly to produce large onions.

Southport White Globe Pure white, true globe form with very crisp flesh, exceedingly mild and fine grained, usually commands highest prices.

Japanese One of the best for the production of large onions for Fall and Winter market, yielding almost twice as many bushels per acre than any other set onion. Somewhat similar to Flat Danvers in color and shape but a trifle thicker and very much larger in circumference. They are very mild, excellent keepers, rapid growers and very few go to seed. The appearance, size, quality and wonderful yields of this variety give it a prominent place among the most valuable sorts.

Prizetaker Produces large, well-ripened bulbs the first season from seed; flesh white; crisp and mild in flavor. The skin is thin, of a bright straw-yellow; form nearly a perfect globe. Under ordinary cultivation this variety will yield bulbs nearly three times as large as the Globe Danvers, while under special cultivation specimen bulbs have been raised to weigh from 4 to 5 pounds each.

Riverside Sweet Spanish or Valencia Resembles Prizetaker but grows to larger size. Very mild, has golden yellow skin and white flesh. Rapidly growing in popularity.

Yellow Globe Danvers Our superior stock of this celebrated variety is of fine round shape. It grows to good size, with thin yellow skin, white flesh, fine grained and excellent quality. It ripens early, keeps well and is very productive.

Danvers Yellow Globe

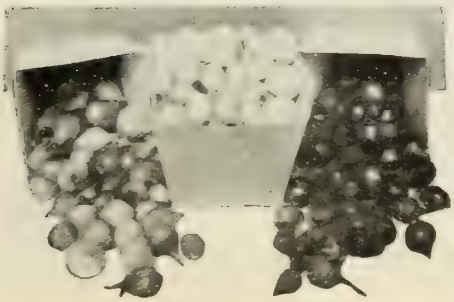
ONION SETS

FINE QUALITY MARKET GARDENERS STOCK SCREENED TO ⅞ INCH

Use a

FELINS TYING MACHINE

FOR BUNCHING SPRING ONIONS

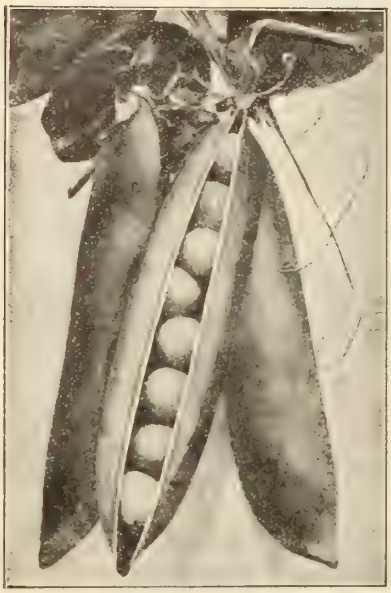


PRICES

Variety	Pkt.	Oz.	¼ Lb.	Lb.
Australian Brown	$ .10	$ .20	$ .50	$1.75
Japanese or Ebenezer	.10	.20	.60	2.00
Mammoth Silver King	.10	.20	.60	2.00
Prizetaker	.10	.20	.60	2.00
Red Wethersfield	.10	.20	.50	1.75
Riverside Sweet Spanish	.10	.25	.75	2.50
Southport White Globe	.10	.25	.75	2.25
Southport Yellow Globe (Brigham)	.10	.25	.75	2.25
White Bunching	.10	.20	.60	2.00
White Pearl	.10	.20	.60	2.00
White Queen	.10	.30	.80	2.75
White Silver Skin, or Portugal	.10	.20	.60	2.00
Yellow Globe Danvers	.10	.20	.60	2.00

ONION SETS	Qt.	Pk.	Bu. 32 lbs.
Japanese (Yellow)	$ .25	$1.50	$4.50
White Silverskin	.25	1.50	4.50
Yellow Danvers	.25	1.50	4.50

Prices subject to change. Postage Extra.



Long Pod Alaska

PEAS

1 quart to 100 feet of drill; 1½ bushels per acre.

Peas grow best on a light, rich, mellow soil under cool and moist weather conditions. Fresh manure and very rich or wet mucky soil should be avoided.

The extra early varieties are very hardy and should be planted as soon as the ground can be made ready, while the larger wrinkled varieties, which are not as hardy but of superior quality, may be planted when the soil has become slightly warmed, as the seed will rot if planted too early.

For private use, sow the seed in double rows, 18 inches apart and 3 inches apart in the row; for market, in single rows 2 to 3 feet apart and 1 inch apart in the rows. The peas will give quicker returns if covered only one inch deep, and where earliness is most important they may be treated this way. Larger pods and greater quantity will be produced if the seed is planted in trenches three to six inches deep and covered with only one to two inches of soil. When the plants are five or six inches high, fill the trench level with the surface. This will result in deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches the seed will not germinate or grow well. The crop should be gathered as fast as it becomes fit for use, as even a few ripe pods left on the vines tend to retard the development of the young pods and prevent the formation of new ones.

FIRST EARLY SMOOTH VARIETIES

Extra Early Alaska Vine strong and vigorous, 2 to 2½ feet high, of a peculiar light green color, pods 3 to 3½ inches long, straight and blunt at the end. Is ready for picking 49 to 50 days from planting. Seed round, blue, slightly pitted. Matures crop very evenly.

Early Bird The most used and best extra early, large podded Dwarf now on the market. Very desirable for market gardeners and truckers. Seed is practically smooth, dark green in color, can be planted as early as the Alaska. Produces a strong, vigorous vine, dwarfed in length. Pods produced in profusion and are long, large, pointed and well filled with good sized peas. Is an excellent cropper and has replaced practically all other extra early varieties.

Bountiful Resembling the Alaska in general habit of growth. Vine 36 inches, foliage gray-green. Pods 3½ inches in length, pointed, gray-green in color. Fit for table use 55 to 57 days from planting; a prolific bearer, making it a valuable variety. Seed blue, medium pitted.

Long-Podded Alaska A favorite with truckers and shippers to Northern markets, producing a very early crop of large, broad, well-filled, dark green pods. Equally as hardy as Extra Early Alaska and much larger. The vines usually grow three feet high and the crop will remain fresh a long time after picking.

Improved Pilot A very early smooth pea with large pods. Very productive, can be planted early, vines three feet.

Mammoth Podded Extra Early An exceptionally early, large podded variety. Matures practically with Alaska and much more productive. Height 3 feet, pods 4 inches long, very dark, broad and round.

WRINKLED VARIETIES

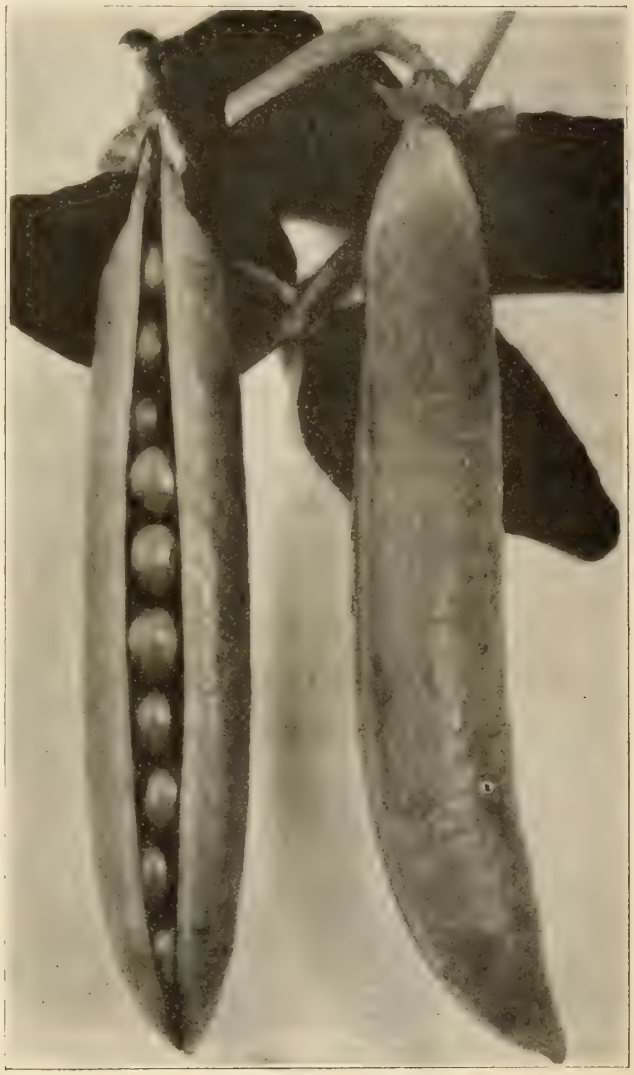
Early Surprise An extra early variety of excellent quality, growing only 15 inches high but producing an abundance of dark green pods 4 to 5 inches long, very broad and well filled. The earliness, quality and the wonderfully prolific characteristics of this variety make it a very profitable sort for market gardeners.

Early Wonder Extremely early, of high quality and very productive. Pods are very dark and can be safely shipped long distances. Will soon become very important as a market gardeners variety.

Blue Bantam An improved strain of the Laxtonian type. Very early and produces pods a little darker than the Laxtonian. Vines are 16 to 18 inches high.

PRICES

Variety	Qt.	Pk.	Bu.
Alaska—Wilt-resistant	$ .35	$1.75	$6.50
Blue Bantam	.45	2.25	8.00
Bountiful	.35	2.00	7.00
Early Bird	.35	2.00	7.00
Early Surprise	.45	2.25	8.00
Early Wonder	.45	2.25	8.00
Extra Early Alaska	.35	1.75	6.50
First and Best	.35	1.75	6.50
Hundredfold	.45	2.25	8.00
Improved Pilot	.45	2.25	8.00
Long Podded Alaska	.35	1.75	6.50
Mammoth Podded Extra Early	.35	2.00	7.50
Pedigree Extra Early	.35	1.75	6.50
Prolific Early Market	.35	1.75	6.50
Black Eyed Peas	.25	1.75	6.00



California Mammoth

PEAS —Continued

WRINKLED VARIETIES

Laxtonian This is one of the finest dwarf early peas. The vines grow 18 to 20 inches high and produce an enormous crop of dark green pods as large as Gradus, maturing a few days ahead of this variety.

California Mammoth Medium early profuse bearer of large handsome dark green pointed pods. Can be very profitably grown by commercial growers and home gardeners as a succession to Early Bird and the Laxtonian types.

Alderman One of the best long vined, main crop varieties. Hardy, prolific, producing vines 3½ to 4 feet in length. Pods large, pointed, dark green in color. Maturing about the same time as the Admiral Dewey.

Gradus or Prosperity One of the best second early, long-strawed, wrinkled varieties. Produces long pointed pods, well filled and of fine table quality. Vines from 2½ to 3 feet in length. Considered one of the most desirable for the market garden or home use.

Little Marvel Larger podded than Nott's Excelsior. Pods blunt ended, well filled with fine quality peas, a splendid cropper.

American Wonder One of the old Dwarf varieties. A good cropper, produces small sized pods, well filled with finest flavored peas.

Premium Gem A second early, longer vine than the American Wonder. Pods similar.

Nott's Excelsior More prolific grower than American Wonder. Pods about the same both as to size and quality. Perhaps a better yielder.

Potlatch Strong, vigorous vines of even growth, 20 to 24 inches in height, with luxuriant dark foliage, bearing pods medium green in color, 3½ to 4 inches in length. Broad and pointed at the ends. No variety known will produce more pods, and no pods could possibly shell out better. The Potlatch is a variety from which everyone may expect great things. Fit for table use 61 days from planting. Seed green, wrinkled, large in size.

Thomas Laxton This variety is of the same growth as that of the Gradus, but is usually three to four days later for market. The pods are square at the ends instead of having a long, sloping point, and considered by some to be of a better flavor than the Gradus.

Dwarf Defiance The best late or main crop Pea. Produces a medium length vine and an abundance of large, long pointed pods of a rich dark green color. Well filled with large luscious peas. For main crop or late variety in the home garden, it cannot be excelled.

Daisy, or Dwarf Telephone A second early, of robust but remarkably even growth. From 16 to 18 inches high. The stout plants are fairly loaded with large, bright green pods. Each pod contains from 7 to 9 large peas of a light bright green color, tender and well flavored.

EDIBLE PODDED PEAS

Mammoth Melting Sugar This is by far the largest and finest of the true sugar or edible podded Peas.

Extra Early Gradus or Prosperity

Dark Green Telephone A tall-growing, late sort, having beautiful dark green pods of very large size, containing 6 to 7 large peas of delicious flavor. Continues in bearing for quite a long time.

Ideal (Wilt Resistant) About a week earlier than Dark Green Telephone, yielding a large crop of very dark, pointed pods 5 inches long. Vine about 2 feet tall and 100 per cent resistant to Wilt.

PRICES	Qt.	Pk.	Bu.
Alderman—Wilt resistant	$ .40	$2.25	$7.50
American Wonder	.40	2.50	9.00
California Mammoth	.40	2.25	8.00
Dark Green Telephone—Wilt resistant	.40	2.00	7.00
Dwarf Defiance	.40	2.50	9.00
Dwarf Telephone—Wilt resistant	.40	2.25	7.50
Gradus or Prosperity	.40	2.25	8.00
Ideal Wilt Resistant	.40	2.00	7.50
Laxtonian	.40	2.25	8.00
Laxtons Progress	.40	2.25	7.50
Mammoth Melting Sugar	.50	3.00	10.00
Morses Market	.40	2.25	8.00
No. 95 Icer	.40	2.50	8.50
Nott's Excelsior	.40	2.50	9.00
Potlatch—Wilt resistant	.40	2.50	8.50
Premium Gem	.40	2.50	9.00
Thomas Laxton	.40	2.25	7.50
World's Record	.40	2.25	8.00

PUMPKINS

1 ounce to 15 hills; 4 pounds per acre, in hills 10 by 10 feet apart.

CULTURE.—Sow in good soil in May, when the ground has become warm, in hills 8 to 10 feet apart each way, or in fields of corn about every fourth hill; always avoid planting near other vines, as they will hybridize.

Sugar Pie Pumpkins This is the best of all Pumpkins for pies. The fruit is small to medium in size, flesh solid and fine grained, the seed cavity small, and it is a splendid keeper.

Quaker Pie It is oval in shape, and tapers toward each end; of a creamy color, both inside and out. Being fine grained and rich flavored, it makes a superior quality of pies.

Connecticut Field Used principally for feeding stock, shape almost round, of medium size, skin deep yellow and smooth, flesh yellow.

Cushaw, or Crookneck One of the most popular varieties to grow for pies as well as for stock feeding. Fruits 2 feet in length, with long, solid neck, most frequently curved in form; seeds are located in the lower bulb-like end. Skin striped with mottled bands of creamy white. Flesh rich, creamy yellow, tender and of exceptionally fine flavor.

Sweet Potato Excellent for pies, pear-shaped, medium sized, flesh and skin creamy white, fine grained, sweet and delicious; first-class keeper.

Japanese Pie Crookneck variety, with extremely small seed cavity; nearly all solid meat; quality extra fine; seeds distinct in appearance, being curiously sculptured in the manner of Chinese letters. Productive, ripens early, medium size, good keeper.

King of Mammoths This giant variety grows to enormous size. Deep yellow, glossy color. Splendid to grow for stock and exhibition purposes.

Sugar Pie Pumpkin

Manns Parsley grown in N. J., under Irrigation

PARSLEY

1 ounce to 150 feet of drill.

Sow in rows 1 foot apart and 1 inch apart in the row. The seed is slow to germinate, and should be given the most favorable conditions. A deep, rich, loamy soil is required. For winter use a few plants placed in a box in the cellar will give a supply.

Champion Extra Dark Moss Curled The large leaves are very heavily crimped and curled. Very productive and most attractive, both on account of its dark green coloring and fine mossy appearance.

Turnip-Rooted, or Hamburg The large fleshy root, which resembles the root of a Parsnip, and is highly esteemed for flavoring soups, stews, etc.

Variety	Pkt.	¼ Lb.	Lb.	10 Lb.
PARSLEY				
Champion Extra Dark Moss Curled	$ .10	$ .20	$ .60	$5.00
Green Castle	.10	.20	.60	5.00
Paramount	.10	.20	.60	5.00
Plain or Single	.10	.20	.60	5.00
Turnip-Rooted, or Hamburg	.10	.25	.75	
PARSNIPS				
Special Hollow Crown	.10	.25	.75	6.50
PUMPKINS				
Connecticut Field	.10	.25	.75	5.50
Cushaw, or Crookneck	.10	.30	1.00	8.50
Japanese Pie	.10	.25	.90	7.50
King of Mammoths	.10	.30	1.00	8.50
Quaker Pie	.10	.30	.90	7.50
Sugar Pie Pumpkins	.10	.25	.75	6.50
Sweet Potato	.10	.25	.75	6.50

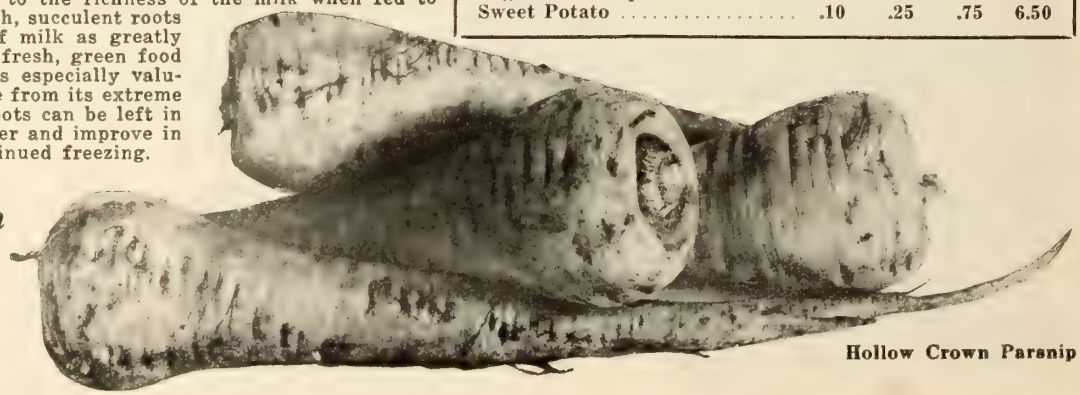
PARSNIPS

1 ounce to 150 feet of drill.

Parsnips are well known as a delicious table vegetable, but their value for the purpose of feeding cattle and stock is but little appreciated. The parsnip is rich in saccharine food, which adds greatly to the richness of the milk when fed to cows, while the fresh, succulent roots increase the flow of milk as greatly as does the use of fresh, green food in the spring. It is especially valuable for the purpose from its extreme hardiness, as the roots can be left in the ground all winter and improve in quality by the continued freezing.

All American

The outstanding parsnip in the All American trials. A Mid-West market garden strain.

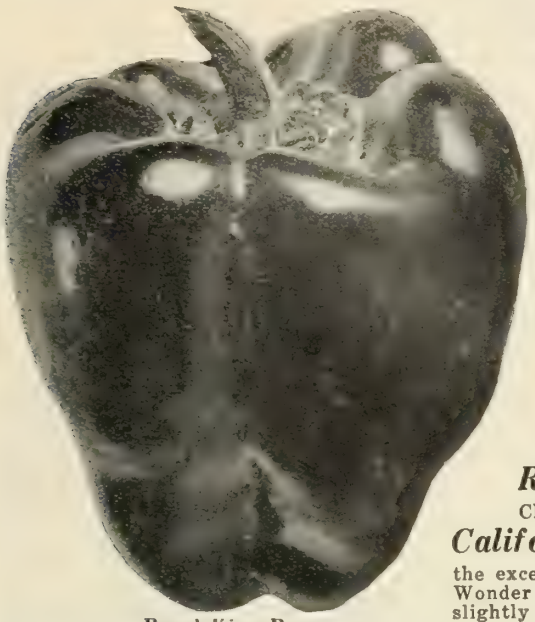


Hollow Crown Parsnip

PEPPERS

1 oz. to 1,500 plants.

Peppers should be sown either indoors or in hotbeds early in April and transplanted to the permanent beds when about 3 inches high in two foot drills and two feet apart in the drills. The seed can also be sown in open ground when danger from frost is past but the crop will naturally be much later. A top dressing of fertilizer or poultry manure well mixed with the soil when the plants are about 6 inches high will materially aid in the production of a big crop.



Royal King Pepper

Royal King Plants grow about 2½ feet high, and are vigorous; compact and very productive, commencing to bear very early and continuing until killed by frost. The fruit is very large, bright and glossy and the extremely thick flesh is sweet and mild. They will stand distant shipping and hold up well for market as they do not wilt nor become ripe near so quickly as other large varieties. This strain is extensively grown in the South by large shippers and deserves the attention of every trucker and home gardener.

Early Giant The earliest medium large pepper in cultivation; being earlier than Neapolitian. The plants are very uniform in growth, dwarf and compact, seldom over 18 inches in height, and very productive. Fruits pendant, mild and sweet, similar to Bull Nose in form.

Ruby Giant A variety of Mango Pepper which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant. Grows to large size and is very mild.

California Wonder Its large, smooth, extremely heavy, very mild, thick flesh, make this variety truly a wonder. Combining the excellent quality of the Pimento and the size of Crimson Giant, California Wonder is being grown for all purposes. Plants are sturdy, productive and slightly spreading, bearing five to nine large glossy fruits to a setting, averaging one-half pound each. Deserves the attention of every pepper grower.

Pimento or Perfection A medium early, prolific, perfectly mild variety with extremely thick flesh. On account of its thick flesh it will hold up for a long time, and is an excellent sort for canning whole.

Chili, Small Red conical pod, about 2 inches long, very hot. Fine for pepper sauce and seasoning.

Cherry Red Fruit small, round, color rich scarlet, very hot.

Ruby King Good variety for mangoes or pickling; very productive and sweet.

Chinese Giant This desirable variety is one of the largest sweet peppers ever offered. The flesh is quite thick, very mild and remarkably sweet.

Large Bell, or Bull Nose This large, early and productive sort has the most pungent flavor of all the large peppers. Thick flesh.

Neapolitan A variety of Sweet Pepper which matures very early. It grows about 3 inches long, and is remarkably sweet.

Long Red Cayenne The pods are long and slender; bright red color and very pungent. This is an old-time favorite and is used extensively for bunching with pot-herbs.

World Beater or Sweet Mountain This splendid pepper is a cross between Chinese Giant and Ruby King, and combines the size of one and the earliness of the other. It is exceedingly mild, very large and the color good. The flesh is very thick, making distant shipment possible.

California Wonder

Chinese Giant Pepper

Pepper Plants

In All The Leading Varieties. FRESH DAILY **See Page 36.**

PRICES	Pkt.	Oz.	¼ Lb.	Lb.
California Wonder	$ .10	$ .30	$1.00	$3.50
Cherry Red	.10	.30	1.00	3.50
Chili, Small	.10	.30	1.00	3.75
Chinese Giant	.10	.40	1.25	4.00
Early Giant	.25	.30	1.00	3.50
Half Long Narrow Cayenne	.10	.40	1.10	4.00
Large Bell, or Bull Nose	.10	.30	.85	3.00
Long Red Cayenne	.10	.30	1.00	3.50
Mammoth Golden Queen	.10	.30	1.00	3.75
Neapolitan	.10	.30	1.00	3.50
Pimento or Perfection	.10	.30	1.00	3.50
Royal King	.10	.35	1.00	3.50
Ruby Giant	.10	.40	1.35	5.00
Ruby King	.10	.30	.85	3.00
Sunnybrook or Cheese	.10	.30	1.00	3.50
World Beater or Sweet Mountain	.10	.30	.85	3.00

RADISHES

1 oz. for 100 feet of drill; 9 lbs. per acre.

Extra Early Scarlet Globe Outdoor Forcing

Light, sandy soil, rich in organic matter is essential to produce crisp and tender radishes. For an early crop sow the seed as soon as the ground can be worked, in drills 6 to 10 inches apart, covering the seed half an inch deep. When the plants are well started, thin out to one inch apart in the drills. Frequent watering in dry weather is very beneficial as high quality is largely dependent upon rapid growth. For a continuous supply, successive plantings should be made at intervals of 10 days to two weeks, selecting varieties best suited for the season.

Comet See Page 3.

Extra Early Scarlet Globe

From Specially Selected Transplanted Roots

This is the market gardener's favorite as a forcing Radish, very early; mild and crisp, juicy and tender; top small, will stand heat without becoming pithy. One of the best selling and most attractive Radishes on account of its bright scarlet color and handsome shape. Our stock of this is the very best, selected with special care as to size, shape, color and earliness, and market gardeners will find it a money maker, as it is just right in every respect. Pkt., 10c; ¼ lb., 20c; lb., 50c; 10 lbs., $4.00; 25 lbs., $9.00; 100 lbs., $30.00.

Greenhouse Scarlet Globe This strain has been especially bred to meet the very exacting requirements of greenhouse cultivation, producing quickly a highly marketable crop of uniformly shaped radishes of fine quality.

Glowing Ball (New) Brilliant cerise red, true globe shape; most outstanding novelty of the 1933 All American trials.

Early Deep Scarlet Turnip For outdoor sowing this is the most important in the Baltimore market, thousands of pounds being annually used. Our stock is the very best. It has a rich scarlet color, ball shape, a little larger top and matures a week later than the forcing varieties.

Ruby-Pearl The color is a bright scarlet and white. It is extremely quick to mature, being ready for the table in 20 days from the time of sowing the seed. It is invaluable for forcing under glass as well as for growth in the open air. The skin is very smooth, and its clear color gives it an appetizing appearance on the table. Its flavor is excellent, and its qualities high in all respects.

Sparkler One of the most attractive of the Turnip Radishes for early planting outdoors. Color very deep scarlet with 1/3 white at the tip; flesh white and of the best quality.

Crimson Giant A variety combining earliness and great size. It grows much larger than other extra early varieties, but does not become pithy even when fully twice as large in diameter and a week older; beautiful crimson-carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing.

Scarlet Globe No. 8 A reselected strain so uniform in its maturity that each sowing can be entirely gathered and bunched at one pulling, with practically no waste. This means more bunches per row, more time saved in bunching, and the ground ready for the next crop a week earlier. This equalized maturity also permits sowing this crop between rows of beans, corn, etc., as a "catch crop."

Golden Globe Second early, grows to a good size; stands the heat well; very popular with market gardeners; a beautiful golden yellow, flesh crisp and tender.

PRICES

	¼ Lb.	Lb.	10 Lb.	100 Lb.
Comet	$ .25	$ .85	$7.50	$65.00
Glowing Ball (new)	.25	.75	7.00	60.00
Scarlet Globe Forcing	.20	.50	4.00	30.00
Scarlet Globe No. 8	.25	.75	6.00	50.00
Sparkler	.20	.50	4.50	35.00
White Icicle	.20	.50	4.00	35.00
White Strasburg	.20	.50	4.00	35.00
ALL OTHER VARIETIES	.25	.75	7.00	60.00

Early Scarlet Turnip, White Tipped

RADISHES (Continued)

French Breakfast Color is a scarlet rose, shading to a waxy white at the tip; quick growth, mild and tender, good for forcing.

Feton's Model White Box (Forcing) It is of most handsome shape, very early and has but few leaves, thus making it of special value for growing in hotbeds or "boxes," and one-third more radishes can be grown in the same space than with most other sorts. It is of clear white color, solid, juicy and unsurpassed in flavor.

Long Scarlet This is the standard extra early long scarlet market variety, short top, long scarlet roots; crisp, fine flavor.

White Icicle Radish It fully equals in crisp, tender flesh and mild flavor the popular White Vienna or Lady Finger, while it is as early as Long Scarlet Short Top. Planted in spring the young Radishes are ready for use in 20 to 25 days from sowing the seed, and their long, slender form and pure paper-white skin are most attractive when bunched for market.

Cincinnati Market ("Glass Radish") A selected strain of the Long Scarlet, growing to slightly larger size fully as early and darker in coloring.

Improved Chartier The color at top is crimson, running into pink at middle, and from thence downward is pure waxy white. It is of a very quick growth, and ready for use nearly as early as Long Scarlet. Exceedingly tender and crisp.

Pearl Forcing This variety is a cross between Wood's Early Frame and White Strasburg. The color is a pearl white with a fine waxy appearance, very firm and solid. They will remain in good condition longer than any other extra early variety.

White Icicle

White Strasburg

Long White Vienna, or Lady Finger This is the finest Long White Radish in cultivation; it is most beautiful in shape, white in color, both skin and flesh are pure snow-white, crisp, brittle, and of rapid growth. Highly recommended.

New White Strasburg A very new desirable summer variety, a favorite with our market gardeners. Skin and flesh both white. It is excellent quality and a quick grower.

Perpetual White Summer This variety introduced by us, has given splendid satisfaction to all who have tried it. They are pure white, of uniform good quality, crisp and brittle, and they keep longer in a fit condition for the table than any variety we know of, hence their name. Perpetual White Summer can be sown any time of the year, and will always produce good radishes fit for market earlier than the Chartier, and keeps in perfect shape for marketing about four weeks, or longer for home use.

White Stuttgart Quick growing and therefore very early. Of the largest size, and both flesh and skin are pure white; quality fine, firm, and brittle. Can be pulled for use at any stage.

Large White Summer Round, smooth, very white, crisp, and tender. The market gardener's favorite for summer use.

WINTER VARIETIES

White Chinese New Celestial

Large, stump-rooted Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition, mild in flavor, brittle, and never woody. Market gardners will find this a special seller.

White Round Spanish Root large, often five inches in diameter, turnip-shaped, skin pure white, flesh white crisp and not becoming pithy, very compact and highly flavored; an excellent sort for winter, as the roots keep a long time.

Improved Half-Long, Black Spanish Radish This new sort is intermediate in shape between the Old Round and Long Black Spanish, and much superior to either. Flesh mild, very sweet and crisp, never pithy, and is decidedly the best of all black radishes. If stored in damp sand in the cellar, they will keep all winter.

Round Black Spanish Like the Long White Spanish, except in shape.

Chinese Rose A splendid rose-red variety that keeps during winter; tempting flavor and very crisp.

Long White Spanish This variety is of a snow-white color, similar to the White Strasburg in shape, but rather more stump-rooted.

Long Black Spanish Black skin, white flesh, very firm and solid, good keeper, grows long and large.

California Mammoth Was first introduced into this country by the Chinese in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter.

Long Scarlet

Manns' annual importation of spinach seed amounts to thousands of bags, and is sold entirely to growers. Such popularity must be deserved.

SPINACH

1 oz. to 100 ft. of drill; 12 to 15 lbs. per acre.

OUR IMPROVED STRAINS ARE GROWN BY THE ORIGINATORS AND WHEN BETTER QUALITY IS PRODUCED WE ARE ALWAYS AMONG THE FIRST TO OFFER IT.

One of the most staple vegetables of the American table, possessing highly valuable and health giving qualities; easily grown, requiring but little attention and in sections where the soil is rich, very profitable crops are produced.

Select a rich piece of ground, the richer the better; and for late spring and early summer use, sow the seed during February, March and April in drills one foot to 20 inches apart, one-half to one inch deep. When the plants are well started thin out to 4 to 6 inches apart, or sow the seed thinly and allow all the plants to stand.

For winter and early spring use, sow either in drills or broadcast during August, September and October. A top dressing of Nitrate of Soda will make a vast improvement in the earliness, size and quality of the crop.

Old Dominion A later seeding type of Virginia Yellows Resistant Savoy which stands 12 to 15 days longer, having about the same season of growth as our Extra Dark Green Savoy. With old Dominion it is now possible to successfully grow an early spring crop on diseased soil, where it was previously necessary to take chances with the early seeding character of Virginia Blight Resistant.

Manns' Extra Dark Green Savoy

As with other important introductions of new strains having real merit, we are among the first in America to offer this improved type of Bloomsdale Savoy. It is only about two days later than Reselected, but the plants are larger, less liable to bolt to seed, more heavily crumpled and of more upright growth. The very dark green color, however, is its chief advantage and in making the selections for this deep color the plant breeder has also improved the strain in its savoyed characteristics and absolute freedom from smooth leaved plants. Some of the most successful spinach growers in this section have already reported this new strain a very profitable crop.

Manns' Reselected Bloomsdale Savoy

This strain has been developed in response to the urgent demand on the part of large spinach growers for an improvement in the quality of the regular commercial Bloomsdale grown in Holland.

The plants are large, heavy, uniform and in every way especially re-selected to match the ideal Bloomsdale Savoy type.

Virginia Blight Resistant Bloomsdale

A strain of Bloomsdale Savoy especially developed by the Virginia Experimental Station for the purpose of resisting the disease commonly called yellows. Used extensively in the vicinity of Norfolk and in other sections where blight is encountered.

Being an American sort, it matures very quickly and is therefore preferred by some growers for early Fall sowing. Our seed is grown from thoroughly reliable, genuine Virginia Blight Resistant stock.

PRICES	Lb.	10 Lbs.	25 Lbs.	100 Lbs.
Extra Dark Green Savoy	$ .20	$1.60	$3.75	$13.00*
Giant Smooth Leaved	.25	1.90	4.25	15.00*
Juliana	.25	1.90	4.25	15.00*
Long Season	.25	1.90	4.25	15.00*
Long Standing Savoy	.20	1.75	4.00	14.00*
Old Dominion Blight Resistant	.25	2.00	4.50	16.00*
Presto Savoy	.25	2.25	5.00	17.50*
Reselected Bloomsdale Savoy	.20	1.50	3.25	11.00*
Special Summer Savoy	.25	1.90	4.25	15.00*
Victoria	.20	1.90	4.50	17.00*
Virginia Blight Resistant	.20	1.75	4.00	14.00*

*Cash Discount, $1.00 per 100 lbs.
*Ton Lots, deduct $1.00 per 100 lbs.

	Pkt.	Oz.	¼ Lb.	Lb.
New Zealand	$ .10	$ .15	$ .25	$ .75
Southland Summer	.10	.15	.25	.75

Manns' Special Summer Savoy

Holland Field of Early Long Standing Savoy for Seed

Manns' Early Long Standing Savoy Nearly as early as reselected savoy but has the very valuable advantage of standing in perfect condition, without bolting to seed, 10 to 14 days longer than other varieties. This feature is worth thousands of dollars to spinach growers, for with this variety it is possible to market the crop when it is convenient and advantageous for the grower to do so. Many severe losses have been incurred because cutters were not available, weather conditions unfavorable, or prices were too low, but Early Long Standing will wait for cutters, for weather, and for prices.

Long Season Very successfully grown for supplying local markets during warm weather when other varieties have gone to seed. The beautiful large plants are in prime condition in about 50 days and remain marketable for 15 to 20 days. Somewhat earlier than Juliana and producing extremely dark glossy green leaves, thoroughly savoyed, thick and firm in texture.

Princess Juliana Greatly resembling savoy as the picture opposite will show; much slower in growth, however, and very late in going to seed. The ideal variety for late spring sowing, as it thrives well in warm weather and is in great demand as long as the weather permits shipping.

Giant Smooth Leaved The most popular variety in Holland for home use and largely used by Western packers of fancy canned goods because of its excellent quality and very dark green color. The flat, extremely heavy leaves do not ship well but are ideal for the grower who contracts by weight.

Southland Summer New special strain of Swiss Chard more closely resembling real spinach, producing large heavily crumpled leaves of a bright green color. Will eventually replace New Zealand.

New Zealand (TETRAGONIA EXPANSA) Not related to regular spinaches but forming larger spreading plants producing fleshy brittle tips and leaves which are used as spinach. Of delightful flavor and practically everbearing.

Manns' Presto Savoy Leaved A new prickly seeded variety possessing outstanding merits over the Roundseeded Bloomsdale, which it resembles identically. Presto is the earliest and quickest growing sort of spinach. It is much hardier than any other variety and will stand cold and unfavorable weather conditions where round seeded sorts will decay and wilt. In addition to this it shows a remarkable resistance against blight, which is a hereditary property in the parent stock, from which it originated.

Manns' Special Summer Savoy Stands warm weather without bolting to seed better than any other Savoy leaved type. A great improvement even on Bloomsdale Long Standing. Very dark green and heavily crumpled leaves.

Manns' Old Dominion, 35 days after sowing grown by Mr. Clarence Shallcross, near Philadelphia.

Mammoth Sandwich Island Salsify

SALSIFY

OR OYSTER PLANT

1 oz. for 50 feet of drill.

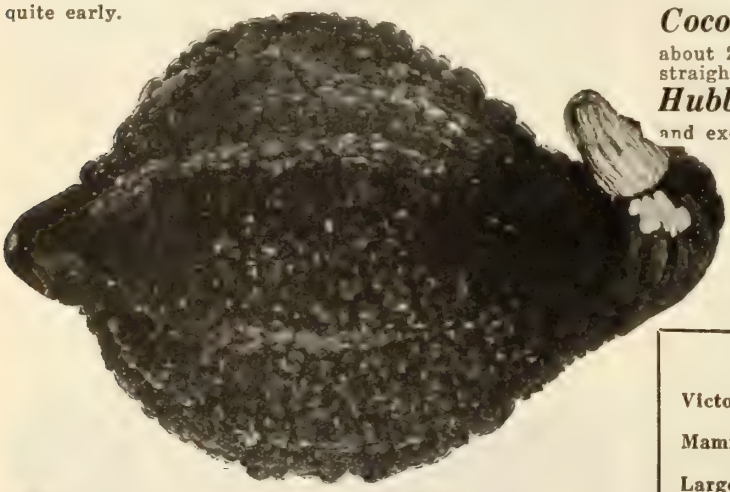
Requires a well enriched, mellow soil, which, previous to sowing the seeds, should be stirred to a depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seed with fine soil 1½ inches in depth, and when the plants are strong enough thin out to 6 inches apart. As the leaves resemble grass, be careful they are not mistaken for it when weeding.

Mammoth Sandwich Island A new and improved type, producing roots of nearly double the size and weight of the old varieties; mild and delicately flavored.

SORREL

BROAD AND NARROW LEAVED

A hardy plant grown for its leaves, which are used as boiling "greens" or salad. Seed should be sown thinly in drills early in spring. When well started thin out to stand 4 to 6 inches apart in the row. The leaves can be gathered for use at any time after the plants are well started in growth, and the roots will continue to produce a further supply. The plant is entirely hardy, and, starting into growth early the following spring, will afford a large supply of fine "greens" quite early.



Improved Hubbard

RHUBARB or Pie Plant

Sow in April or May, in drills 1 foot apart; when 3 or 4 inches high, thin out in rows 6 to 10 inches apart. Transplant the ensuing fall or spring in rich soil. Set out the roots 3 to 4 feet apart each way; the following spring it will be fit to use.

Victoria Very large, the finest cooking variety.

RHUBARB ROOTS—See Page 39.

SQUASH

1 oz. of bush sorts to 40 hills; large seeded 15 hills.
2 lbs. of bush sorts to acre; large seeded 3 to 4 to acre.

Squashes, like other vines, are partial to a light, dry, rich soil. Plant the running varieties in hills 10 feet apart each way; thin out to three plants in a hill. Cultivate frequently until the vines commence running, after which do not work the soil deep.

Extra Early White Bush Squash

Extra Early Jersey White Bush Scallop Green Tinted Preferred by many market gardeners by reason of true decided light green color, even when fully matured.

Golden Summer Crookneck A superior strain of summer crookneck, heavily warted, of a very deep orange color, 9 inches long, of excellent quality and highly productive.

Cocozelle Extra Long Italian Produces dark green fruit about 20 inches long and 3 to 4 inches in diameter; very straight, striped when mature.

Hubbard Well-known winter variety, with very hard firm shell, fine grain, sweet and rich flavor, and excellent for table use. A splendid keeper.

Delicious (Winter) Top shaped, 7 to 8 pound fruits with orange flesh of excellent quality. Requires 100 days.

Boston Marrow A fall and winter variety regarded very highly in the markets. Oval form, pointed, thin rind, fine grain; salmon-colored flesh, remarkably sweet and delicious. Keeps well in winter and will boil dry as a mealy potato.

PRICES

	Pkt.	¼ Lb.	Lb.
RHUBARB			
Victoria	$ .10	$ .40	$1.25
SALSIFY			
Mammoth Sandwich Island	.10	.40	1.25
SORREL			
Large-Leaved French	.10	.50	1.50
Narrow Leaved	.10	.50	1.50
SQUASH			
Boston Marrow (10 lbs. $3.50)	.10	.25	.50
Cocozelle, Extra Long Italian	.10	.30	1.00
Extra Early Jersey White Bush Scallop	.10	.25	.75
Giant Summer Straightneck	.10	.25	.75
Golden Hubbard	.10	.30	.85
Golden Summer Crookneck	.10	.30	1.00
Delicious	.10	.30	1.00
Table Queen	.10	.30	1.00
Green Tinted	.10	.30	.85
Green Warted Hubbard	.10	.30	1.00
Winter Crookneck	.10	.25	.75
Zucchini (Extra Dark)	.10	.50	1.50

MAINE GROWN

SEED POTATOES

LET US QUOTE PRICES ON HIGHEST QUALITY SEED ON BASIS OF LOWEST MARKET VALUE

Potatoes will adapt themselves to various soil conditions as easily as most vegetables. A better crop will be produced, however, on a sandy loam which contains a quantity of well rotted vegetable matter. A clover sod, vetches turned under in the fall, or land which was heavily manured for a previous crop supply ideal conditions.

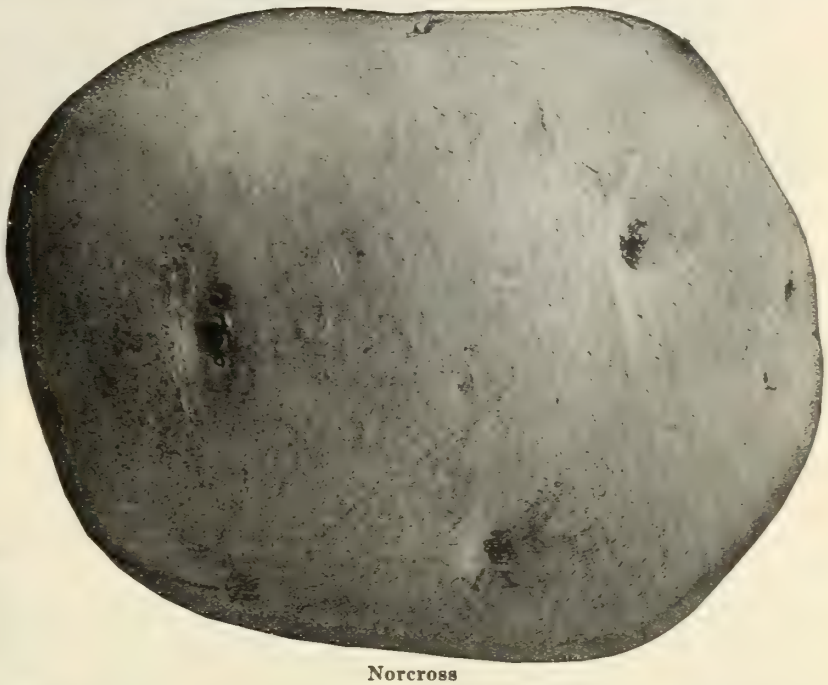
In preparing the seed the eyes should be cut so that the largest part of the surrounding flesh is situated toward the stem end, because the eyes of a potato always have a root system running toward that end and for that reason the sprouts cannot draw moisture from the opposite direction. If the ground you intend to use has produced a scabby crop previously or the seed shows any trace of disease, the pieces should be disinfected as a preventative.

For a very early crop, run off furrows about three feet apart and about four inches deep. Drop the pieces about 15 inches apart in the furrows and cover to a depth of about 1½ inches, gradually filling in the furrows to level as the vines grow larger. For main crop it is just as well to cover the eyes with four inches of soil at once. If fertilizer is used, apply it either in the row or broadcast before planting and be sure that it is thoroughly mixed with the soil so that the seed is not burned. Fresh stable manure will cause the potatoes to become scabby.

Just before the sprouts have appeared above the ground run a light harrow over them to kill the weeds and break up the crust. Continue weeding and harrowing until there is danger of breaking off too many sprouts. Cultivate thoroughly and frequently, being careful not to cut any of the roots, continuing until the vines have attained full growth and begin to spread.

Spraying for insects and blight is very necessary, Pyrox giving very satisfactory results.

The size and quality of the crop and the ability to resist disease is directly dependent upon the seed planted and no amount of cultivation or attention will offset the uncontrollable results of poor seed. Be sure of your crop and plant only the best Maine grown seed potatoes.



Norcross

Red Bliss, or Bliss Triumph This variety is rapidly growing in favor. The tubers are round and uniform in shape, eyes slightly depressed and of a beautiful bright red color, very hardy and vigorous, maturing with extra earlies.

Maine Certified Cobblers Planted, grown and shipped under the extremely rigid requirements of the Maine Dept. of Agriculture, assuring finest quality clean seed, free from disease, uniform in size, true to type and from highly productive strains.

No. 2 Size Cobblers (Out of certified.) Most economical to plant and equally productive as No. 1 size seed.

Irish Cobbler The biggest Potato and greatest producer known among the first early varieties. It will outyield all other early kinds and equal most of the later varieties. Fine quality, color a pure, creamy white, shape round to oblong and smooth. Vines very stocky, with dark foliage.

Early Rose For a generation the standard Potato of the whole country for earliness, yield, thrift, beauty and table qualities, because it always succeeds well in any soil. Our stock is strictly pure.

Green Mountain White skin, flat, oval form, smooth, of good appearance; excellent table quality. Ripens slowly, and is a good keeper. Valuable for late crops. Now taking the lead in all markets.

Gold Coin A very desirable main crop variety proven to be very hardy, of vigorous growth, most productive, of the very best quality. The tubers are slightly oblong, rather broad and quite thick through. The eyes are small, and there is but little waste in paring. The skin is thin, smooth and glossy, of a light golden tint.

Norcross Its shape is a little oblong and slightly flattened, the skin is finely netted or rusty, which always indicates good cooking and eating qualities. The tubers are large and very uniform, maturing medium early.

Dakota Red This very popular local variety has gained favor due to its very productive and fine cooking qualities. It often brings a higher price in Baltimore markets than the most fancy table stock from New York and Maine. Used for late crop only. Let us quote.

Michigan Russet Rapidly gaining popularity in Maryland due to excellent quality and exceptionally high yield. We offer specially selected seed.

SEED SWEET POTATOES

Elzey's Improved The strain used every year by Maryland's most successful sweet potato growers. Yields 25 to 50 per cent more marketable stock and sells higher than any other. Dry and sweet; decidedly the best of all. Prices subject to market fluctuations. Let us quote.

Sweet Potato Plants See Page 39.

Semesan Bel

This instantaneous dip treatment for both white and sweet potatoes is fast replacing all formerly practised methods of seed potato disinfection. Semesan Bel exerts an invigorating effect upon plant growth by removing disease handicaps and repelling the attacks of soil-borne organisms so that yields are greatly increased. Ask for Semesan Bel booklet. 1 lb. treats 16 to 22 bushel. Prices—1 lb., $1.50; 5 lbs., $6.75.

Pritchard, or Scarlet Topper.

TOMATOES

1 oz. to 2,000 plants; ¼ lb. per acre.

All our tomato seeds are grown from stocks, exclusively for seed purposes, by the originators, experienced growers and experts. We are fully convinced of the merit of all new varieties before placing them in our catalog, and therefore strongly recommend our strains as being absolutely reliable.

For early, the seed should be sown in hotbeds during February or the first week in March, in drills 5 inches apart and half an inch deep. Later sowing may be made until the last of April. When the plants are 3 or 4 inches high they should be set out 4 or 5 inches apart in another hotbed or cold frame, or removed into small pots allowing a single plant to the pot. Expose to the air as much as possible to harden. Water freely at time of transplanting, and shelter from the sun a few days until the plants are established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings should be very shallow or the crop may be badly injured, especially if the cultivator is run too near the plants.

Extra Early Varieties

Improved Advance An extra early, large tomato of high quality, round or slightly flattened shape, and exceptionally smooth for such an early variety. As early and hardy as Earliana and yielding more fruit both in the first and subsequent pickings. It is more shapely, more free from cracks and shows less green about the stem than other extra early sorts. With Improved Advance the grower can produce a crop which will stand superior in appearance and quality, in competition with the other extra earlies and command the fancy prices of an early market.

Break O'Day Dr. Fred J. Pritchard of the U. S. Dept. of Agriculture describes his new creation as follows: "Very productive, early variety, highly resistant to wilt and somewhat resistant to blights. Fruits large, smooth, meaty, red, globular."

Scarlet Dawn Winner of a Gold Medal in the 1934 All American Trials. This hybrid of Clark's Early and Marglobe has the shape and structure of Marglobe, but a brighter scarlet color. It is earlier than Bonny Best and yields as heavy as Break-O'Day. Excellent shipping quality as well as being desirable for home growing.

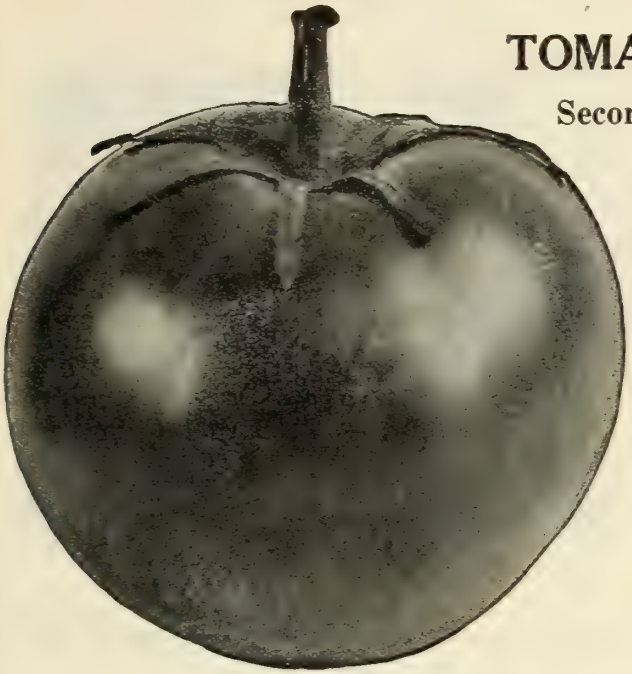
Rutgers Developed under the direction of Prof. L. G. Schermerhorn of the New Jersey Agr. Experiment Station. The fruits begin ripening at the center, are highly colored throughout and have a thick wall structure with very small seed cavity. In comparison with Marglobe they are slightly more flattened at the stem end and will average much larger. Very prolific and desirable for canning, market or the home garden. (Certified Stock.)

PRICES

	Pkt.	Oz.	¼ Lb.	Lb.
Bonny Best	$ .10	$ .30	$1.00	$3.50
Break O'Day	.10	.30	1.00	3.50
Chalk's Early Jewel	.10	.25	.75	2.50
Early Detroit	.10	.30	1.00	3.50
Enormous	.10	.40	1.25	4.00
Greater Baltimore (Ind.)	.10	.30	.90	3.00
Grothens Globe	.10	.40	1.35	5.00
Improved Advance	.10	.50	1.75	6.00
IXL Extra Early	.10	.30	.90	3.00
John Baer	.10	.25	.75	2.50
King of the Earlies	.10	.30	.90	3.50
Kelley's Red	.10	.25	.75	2.50
Marglobe	.10	.25	.75	2.50
Marglobe Special	.10	.30	1.00	3.50
Market Champion	.10	.30	1.00	3.50
Maryland Pride	.10	.40	1.25	4.50
Matchless	.10	.30	1.00	3.50
No. 600—"Red Ponderosa"	.10	.40	1.35	5.00
Oxheart	.10	.45	1.35	5.00
Ponderosa	.10	.50	1.50	5.00
Pritchard (Certified)	.10	.40	1.00	3.50
Red Rock	.10	.25	.60	2.00
Rutgers (Certified)	.10	.40	1.25	4.00
Scarlet Dawn	.10	.45	1.35	5.00
Scarlet Topper (Certified)	.10	.40	1.00	3.50
Sensation	.10	.40	1.35	5.00
Sparks' Earliana	.10	.30	.90	3.00
Stone (Improved)	.10	.25	.75	2.50
Wilt Resistant	.10	.25	.75	2.50
Pear Shaped Red	.10	.30	1.00	
Pear Shaped Yellow	.10	.30	1.00	
Yellow Plum	.10	.30	1.00	

TOMATOES

Second Early and Main Crop Varieties



Marglobe Special

Indiana Baltimore Large, smooth, solid, bright scarlet; second early Tomato; a prolific bearer and fine shipper.

Ponderosa The largest purple fruited Tomato in cultivation; very solid and of finest quality.

Manns' Improved Stone This variety has attained great favor with canners and market gardeners everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red; in shape perfectly smooth, and thicker from stem to blossom end than most varieties, making it most handsome and salable.

Wilt Resistant In developing this wilt-proof strain the plant breeder has made his selections from a strain of the very highest quality in points of production, size, flavor, weight, thickness of skin and color. A very profitable main crop sort.

Marglobe Special Our stock of this extremely popular variety is far superior to the average and we have received many unsolicited testimonials complimenting us on its excellent quality.

It produces heavy yields of large smooth, globular, meaty, red fruits. They have a delightful flavor, and are covered with a thick skin which hinders cracking. Moreover, the plants shade the fruits well and thus protect them from sun-scald.

Scarlet Topper or Pritchard The last introduction of the late Dr. Pritchard and considered by many to be superior to his Marglobe. It is a self-topping disease-resistant sort, heavily productive, of good color and in appearance almost identical to Marglobe. Highly valuable for market garden use, for shipping and packing.

Market Champion A main crop variety possessing all the good qualities to make it ideal for home and market gardeners. Vines large, hardy and productive. Fruits bright scarlet, oval and deep, exceptionally smooth; one of the best of all tomatoes for canning, and a money-maker for the market gardener.

Maryland Pride Since our introduction of it in 1905 it has been grown with great success by canners and market gardeners, who pronounce it "the very best second early and main crop Tomato they have ever grown." The fruit is a beautiful bright red color, magnificent size and handsome, smooth shape. The vines grow vigorously and produce abundantly until killed by frost.

Enormous So named on account of the large size of Tomatoes, which are very solid and smooth. Quality good.

Preserving Tomatoes The following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:

Pear-Shaped Red—Pear-Shaped Yellow—Yellow Plum

PRICES—PAGE 39

Mr. John Manns inspecting single plant selected vines for the future development of stock seed.

RUTABAGAS OR SWEDES

Rutabagas require about four weeks longer to mature than ordinary varieties of turnips, but are more solid, of firmer flesh and therefore keep later into the spring. They are for this reason more desirable for storage, while turnips are better adapted for the early market. Sow during July either in drills or broadcast.

New Canadian Grown for a number of years in the North and held very closely by private individuals, the seed of this variety has always been extremely difficult to procure in a true and reliable type. After three years of searching and checking in our trial grounds, we have found the correct strain and offer it with every assurance that it will soon become the only Rutabaga grown in this section.

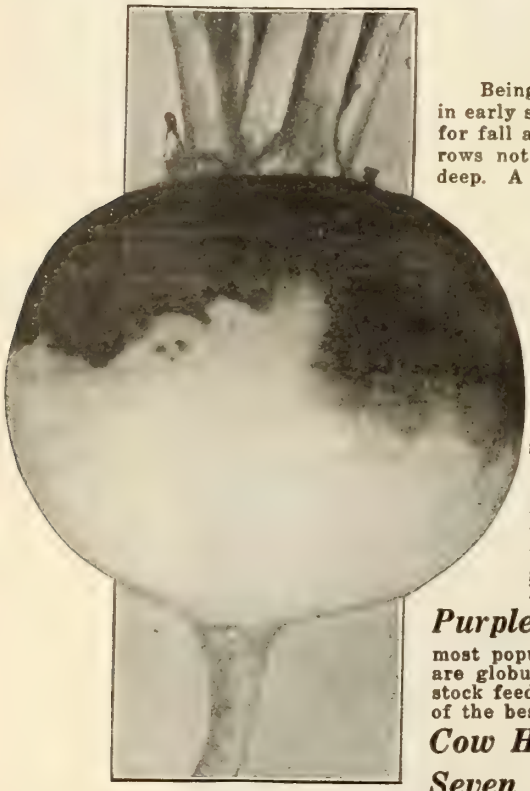
Neckless Purple Top Our superb strain of this excellent variety has become a favorite because of its hardy and productive nature. The flesh is sweet and solid, excellent for table use or stock feeding.

Mr. R. Bunk grows Manns' New Canadian Rutabaga very successfully in Anne Arundel County

TURNIPS

1 oz. to 150 feet of drill; 1 lb. per acre.

Being primarily a cool weather vegetable, turnips thrive best when planted in early spring or in the fall. For spring crop sow the seed early in April, while for fall and winter use, plantings should be made from July to August. Sow in rows not less than 18 inches apart and one-half to three-quarters of an inch deep. A very popular method, however, is to broadcast the seed between rows of corn or in the cultivated orchard. Proper control of root maggots is effected by rotation of crops, the use of commercial fertilizers instead of manure and the application of Mag-o-tite or other carbolic acid emulsion.



Purple Top White Globe Turnip

Snowball Pure white all over and perfectly globe shaped. Very early.

Extra Early Flat White Milan An all white flat variety, the earliest of all turnips. Remains in good condition a long time.

Autumn King Sure to become very popular with Market Gardeners; clear yellow with green tinged top, globular and of large size.

Double Duty Grown chiefly for its abundance of tops, surpassing Seven Top in production and quality. Also forms a pure white semi-globe root, which is sweet and tender.

Yellow Globe Orange Jelly One of the best for general crop; flesh firm and sweet; grows to a large size; splendid for table or stock, and keeps well until late in spring.

Purple Top White Globe Also known as Red Top White Globe. This excellent turnip is decidedly the most popular variety and more extensively grown than any other. The roots are globular, very handsome and of superior quality; either for table use or stock feeding purposes. It is a heavy producer, early, of rapid growth, and one of the best for winter storage.

Cow Horn Very heavy cropper, a quick grower, most practical for stock feed.

Seven Top This variety is principally planted in the South for the green tops which are produced very abundantly.

FOR GREENS—See Broccoli—Page 10.

PRICES

RUTABAGA	Pkt.	¼ Lb.	Lb.
Neckless Purple Top	$ .10	$ .20	$ .50
New Canadian	.10	.40	1.25
TURNIP			
Autumn King	.10	.20	.50
Cow Horn	.10	.15	.40
Double Duty	.10	.20	.60
Extra Early Flat White Milan	.10	.15	.40

TURNIP	Pkt.	¼ Lb.	Lb.
Extra Early Purple Top Flat Milan	.10	.15	.40
Extra Early Six Weeks	.10	.20	.50
Large White Norfolk	.10	.15	.40
Purple Top White Globe	.10	.15	.40
Seven Top	.10	.15	.40
White Early Flat Dutch	.10	.15	.40
Yellow Globe or Orange Jelly	.10	.20	.50

MANNS' VEGETABLE PLANTS, ROOTS, TREES AND BERRIES

We are large producers of the following plants and can fill orders daily with fresh, strong, stocky plants, grown from the best strains of seed. Varieties not grown by ourselves are contracted for with the most reliable and trustworthy plant growers in this section, who, we know from experience, produce only the best plants.

PLEASE NOTE: All plants are quoted f. o. b. Baltimore. On parcel post orders, 15c per 100 must be added for postage and packing. No shipment can be sent into sections having Japanese beetle restrictions.

Let us Quote in Large Quantities

CABBAGE PLANTS, FROST-PROOF.
(Ready in February, March and April.)
35c per 100; $1.50 per 1,000.
Field-grown. (Ready May and June.)
35c per 100; $1.50 per 1,000.

CAULIFLOWER PLANTS. 25c per doz.; $1.50 per 100.

BORECOLE PLANTS. Postpaid, per 100, 75c.

CELERY PLANTS. (Ready in July.)
Golden Plume. Easy Bleacher.
Winter Queen.
75c per 100; $5.00 per 1,000.

EGG PLANTS. 20c per dozen; $1.00 per 100.

LETTUCE PLANTS. (Ready in March, April, September and October.) 50c per 100.

PEPPER PLANTS. (Ready in May and June.)
20c per doz.; $1.00 per 100.

SWEET POTATO PLANTS. (Ready May and June.)
50c per 100; $3.00 per 1,000.

TOMATO PLANTS. Hotbed grown. (Ready in April and May.) 75c per 100; $4.00 per 1,000.
Southern field-grown. 50c per 100. $3.00 per 1,000.

POTTED VEGETABLE PLANTS

EGG PLANTS PEPPERS TOMATOES
5c each; 50c doz.; $3.75 per 100.

ASPARAGUS ROOTS

From one to two years may be saved by planting Asparagus Roots instead of seed. Choice, 2-year-old roots, Palmetto and Mary Washington.
$1.25 per 100; $8.50 per 1,000.

HORSERADISH ROOTS. Maliner Kren or Bohemian.
Postpaid, doz., 25c; 100, $1.25.

RHUBARB ROOTS. Best market varieties.
$1.00 per doz.; $7.50 per 100.

FRUIT TREES

APPLES. 5 to 6 ft. 75c. each, $6.50 per 10. Delicious, Grimes Golden, Hyslop Crab, McIntosh, Jonathon, Smoke House, Stark, Spitzenburg, Stayman's Winesap, Wealthy, York Imperial, etc.
PEARS. No. 1 grade, 11/16 in. and up 90c each. Bartlett, Sickel, Keiffer.
PEACHES. Strong 2 yr. 5 to 6 ft. 75c each. Belle of Georgia, Carman, Crawfords Early, Crawfords Late, Elberta, Heath Cling, J. H. Hale, Niagara, Oriole, Shipley Late Red, etc.
CHERRIES. 2 yr. old Budded No. 1, 11/16 in. and up $1.00 each, $8.50 per 10.
SWEET—Bing, Black Tartarian, Napoleon, Yellow Spanish.
SOUR—Early Richmond, Montmorency.
PLUMS AND DAMSONS. 5 to 6 ft. 75c each. Abundance, Burbank, Moore's Arctic, Shrop-Shire Damson.
APRICOTS ON PEACH. Early Golden, 1 yr. 5 to 6 ft. 75c ea.
QUINCE. Orange, 5/8 in. diameter and up, $1.25 each.

NUT TREES

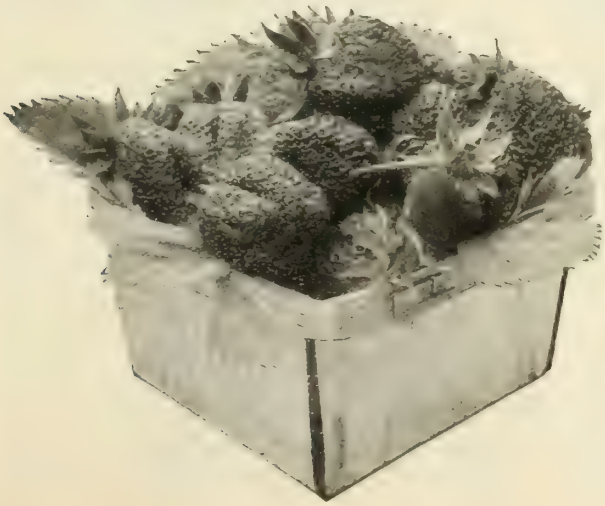
BUTTERNUT. 4 to 6 ft. $1.85 each.
FILBERT. 4 to 5 ft. $1.25 each.
HICKORY. 6 to 8 ft. $3.50 each.
WALNUT. Black, 5 to 6 ft. $1.25 each.

SHADE TREES

MAPLE. Silver, 8 to 10 ft., $1.25; Norway, 8 to 10 ft., $2.00; Schwedlers Scarlet (50 ft.-70 ft.), 8 to 10 ft., $2.00.
BIRCH. White, 8 to 10 ft., $2.25; Canoe, 6 to 8 ft., $2.00; Weeping, 6 to 8 ft., $3.25.
TULIP TREE. 6 to 8 ft., $1.75.
SYCAMORE. American Planetree, 8 to 10 ft., $2.00.
POPLAR. Lombardy, 6 to 8 ft., 75c; 10 for $5.00.
LINDEN. Tilia Americana, 8 to 10 ft., $2.25.
AMERICAN ELM. (80 ft. to 100 ft.), 8 to 10 ft., $2.50.

SMALL FRUITS AND BERRIES

BLACKBERRIES. Eldorado, Best of All, Macatawa, 10 for 75c; 100 for $3.50.
CURRANTS. Cherry, Wilder, White Grape, etc. 10 for $1.50. 100 for $10.00.
GOOSEBERRIES. Downing (Green) Red Jacket, 2 yr. No. 1, 35c each; 10 for $2.50; 100 for $12.00.
DEWBERRIES. Austin, Youngberry, 10 for 65c; 100 for $4.00.
RASPBERRIES. Chief-red; Cumberland-black; Lathan-red; Logan-black, 10 for 65c; 100 for $4.00.



STRAWBERRY PLANTS

OCTOBER 15th TO MAY 10th.

We can supply fresh, strong, healthy plants of all the leading varieties in any quantity. Following is a partial list of the most popular sorts for planting in the vicinity of Baltimore.

Dorsett. Most productive, delicious and dependable of all early varieties. $1.50 per 100; $6.00 per 1,000.

Big Joe. Midseason. 85c per 100; $5.25 per 1,000.

Chesapeake. Late, very productive. 90c per 100; $6.00 per 1,000.

EVERBEARING

MASTODON. Undoubtedly the best everbearing variety in cultivation, producing a large crop of high quality fruit the same year they are set out. The main crop ripens in the fall.

$1.25 per 100; 1,000, $7.50.

Get Our Price on Berry Boxes

MANNS' SUPERIOR FARM SEEDS

Our fair dealing and conservative methods have resulted in an enormous increase in the volume of our field seed business, and we are thoroughly convinced that high quality seed at a reasonable price will make many more pleased customers during this year.

Our experience in this line and our equipment protect you from the many losses which must result from the planting of inferior seed, which is expensive at any price. All seeds offered must strictly conform to our high standards, and purchasers may depend upon our best efforts to supply only seed which is fresh, pure and free from weeds.

Continual market fluctuations make it impossible to quote firm prices here; changes are made almost daily. We shall, therefore, appreciate the opportunity to mail samples and quote the very latest price on any quantity.

When comparing quotations, consider both purity and germination.

GRASS SEEDS

KENTUCKY BLUE GRASS. June Grass. (Poa pratensis.) Universally known; desirable for pastures and lawns. Sow in fall or spring at rate of 2 or 3 bushels per acre. Fancy clean seed.

RED TOP GRASS. (Agrostis vulgaris.) Thrives well in any soil, but best on low land; produces a firm sod. Sow 1 to 2 bushels per acre.

TIMOTHY. (Phleum pratense.) Well known variety. When ready to buy write for latest prices, whether a bag or a carload. (Bushel 45 pounds.)

ORCHARD GRASS. (Dactylis glomerata.) Extremely hardy and widely known. One of the earliest to start in spring; grows rapidly; furnishes an abundance of pasture the entire season. 1½ to 2 bushels per acre. (Bushel 14 pounds.)

RHODE ISLAND BENT GRASS. (Agrostis canina.) Valuable for lawns. Sow 3 to 4 bushels per acre for lawn. 1½ to 3 bushels for pasture. (Bushel 12 pounds.)

CREEPING BENT GRASS. (Agrostis stolonifera.) Excellent for pasture when mixed with other grasses; succeeds well in most situations and thrives in moist land. Sow 40 pounds per acre. (Bushel 14 pounds.)

DROUGHT RESISTING GRASSES

PERENNIAL RYE GRASS. (Lolium perenne.) Very nutritious; valuable for meadows or permanent pastures; rapid grower; most prominent grass in England. Sow 1 to 1½ bushels per acre. (Bushel 24 lbs.)

MEADOW FESCUE. (Festuca pratensis.) Thrives in all soil; excellent for permanent pastures; starts early; very productive. Sow 1 to 1½ bushels per acre.

SHEEP'S FESCUE. (Festuca ovina.) Grows naturally on light, dry, sandy soils and mountain pastures; considered quite valuable mixed with other grasses for permanent early spring pasture. (About 12 pounds.)

HARD FESCUE. (Festuca duriuscula.) Not very productive, but it is of a very fine quality, and thrives well in dry situations where many other grasses would fail, thus making a desirable pasture variety.

MILLET

GERMAN OR GOLDEN MILLET. True Southern grown German Millet Seed is far superior to Western grown seed.

MANNS' PERMANENT PASTURE MIXTURES

are giving wonderful results. They contain pure seed of high vitality, with varieties proportioned to meet the specific requirements of our individual customers. Let us know your particular needs and we shall be pleased to quote attractive prices.

BIRD SEED

FRESH, RECLEANED STOCK

Postage extra.

Canary	lb. 10c	Sunflower	lb. 10c
Rape	lb. 10c	Lettuce Seed	lb. 25c
Millet	lb. 10c	Mixed Canary Seed	lb. 10c
Hemp	lb. 10c	Cuttle Fish Bone	lb. 40c
Maw, ¼ lb., 10c	lb. 30c		

CYCLONE SEED SOWER

Has a national reputation as absolutely the best hand sower on the market.

Price—$2.50 each Postpaid

CLOVERS

MEDIUM OR COMMON RED. (Trifolium pratense.) The Clover Seed of Commerce, and the most important and valuable of the Clover family for agricultural purposes. Sow 15 pounds per acre. (Bushel 60 pounds.)

ALSIKE OR HYBRID. (Swedish.) (Trifolium hybridum.) Hardiest of all Clovers; perennial. On rich, moist soils it yields large quantities of hay or pasturage, as it forms a thick bottom; has fibrous roots like White Clover. Esteemed highly by bee keepers.

MAMMOTH CLOVER. (Trifolium pratense perenne.) Valuable with other grasses for mixed hay; ripens about with Timothy. Being a rank grower, it is largely used for plowing under as a fertilizer.

WHITE DUTCH. (Trifolium repens.) Grows naturally in pastures in a great variety of soils and situations; indispensable in parks and lawns.

CRIMSON CLOVER. (Trifolium incarnatum.) Being an annual, it must be sown in July, August and September of each year, and, the spring following, can be cut for soiling by April 20th; for ensilage, May 1st to 15th; for seed, about first week of June. Can be grown in corn, or any cultivated crop. Ten to fifteen pounds necessary to seed an acre. Cover with a light harrow. (Bushel 60 pounds.)

ALFALFA OR LUCERNE. (Medicago sativa.) Prefers sand or gravel soil. Wet sub-soil being fatal to the plant. Roots 3 to 4 feet deep, and when well established lasts for years. 2 to 3 crops a year can be cut. Not recommended for pasture.

BOKHARA OR WHITE BLOSSOM SWEET CLOVER. (Melilotus alba.) This slightly resembles Alfalfa in growth, but is much taller, with leafier and stiffer stems. It frequently grows 5 to 6 feet in height and branches freely, with slender spikes of small, fragrant, white flowers, which afford an excellent food for bees. (Bushel 60 pounds.)

JAPAN CLOVER. This makes most nutritious and desirable summer pasture. Grows well and spreads rapidly on poor lands, hillside and under the shade of trees. (Bushel 25 pounds.)

DWARF ESSEX RAPE

This plant is extensively grown for forage, especially for sheep, and for green manure. Prepare the ground as for turnips and sow in June or July in rows two and a half feet apart at the rate of two and a half pounds of seed per acre.

SORGHUM OR CANE

EARLY ORANGE SORGHUM. This variety is similar in growth to Early Amber, but under fair conditions produces a heavier crop. It is better for stock feeding than the Amber.

SUDAN GRASS

Sudan, the greatest forage crop, should be grown on every farm, where either hay or pasture is desired. It is highly resistant to drought and stands very heavy grazing. Yields from 2 to 10 tons per acre, is superior to either Millet or Sorghum in feeding quality, and may be fed in unlimited quantities.

COW PEAS

There is no surer or cheaper means of improving and increasing the productiveness of our soils than by sowing the Cow Pea. It has the power to extract costly nitrogen from the atmosphere and to store the same in the vines and roots, so that the land is enriched and its condition improved.

WHIPPOORWILL. A favorite early bunch-growing variety. A prime favorite in the North and West on account of its early maturity and habit of growth.

SOY OR SOJA BEANS

A Great Drought-Resisting Forage Crop, Producing Immense Quantities of Nutritious Food, Besides Being an Excellent Soil Improver.

The Soy Bean is coming right to the front as a great soil enricher, as a food for hogs or cattle, both in the green and dry state. To plow under in the green state it is certainly one of the very best plants, next to Cow Peas.

CANADA FIELD PEAS

Sown in open weather during December, January, February and March, making large yields of most nutritious food, which can be used either green or cured for hay. It also makes a good green manuring crop to turn under, but not equal to Cow Peas. A light seeding of oats, rye or barley will increase the yield and help to support the vines when the crop comes to maturity. Ready for cutting in May and June, cures easily and makes splendid hay.

BUCKWHEAT

JAPANESE. This variety yields very largely. The kernels are larger than other sorts, but owing to its branching qualities it need not be sown so thickly.

SILVER HULL. A superior variety in every way to the ordinary Buckwheat which it has almost entirely superseded.

OATS

WHITE SPRING OATS. Our best recleaned stock of these are Choice Northern grown, all heavy oats, which have been recleaned by us.

WRITE for Samples and Prices on Most Profitable Varieties WHEAT—RYE—BARLEY.

SEED CHART

SEED	Weight per Bu.	Pounds per Acre	TIME OF SEEDING
Alfalfa	60	15-20	March, May—August, September
Alsike Clover	60	6-10	January, April—August, October
Barley	48	72-96	March, April—September
Blue Grass	14	30-40	February, June—August, October
Buckwheat	48	48-60	May—July
Corn, Field	56	7-10	May—July
Corn, Ensilage	56	30-35	May—July
Clover, Alsike	60	6-10	January, April—August, October
Clover, Crimson	60	15-20	July—October
Clover, Japan	25	25-30	February—May
Clover, Red	60	10-12	January, April—August, November
Clover, Sweet	60	15-25	January, May—July, September
Clover, White	60	3-5	February, June—August, October
Cowpeas (Drilled)	60	45-70	May—August
Kaffir Corn	56	20-30	May—July
Lespedeza, Korean	25	15-25	February—May
Lespedeza, Japan	25	25-30	February—May
Meadow Fescue	24	25-35	March, May—August, September
Millet, German	50	40-50	May—July
Millet, Hungarian	48	40-50	May—July
Oats	32	50-75	March—May
Orchard Grass	14	20-25	March, May—August, October
Pasture Mixture	25	25-35	March, June—August, October
Rape, Dwarf Essex	56	6-10	April—September
Redtop, Solid	14	8-12	February, June—August, October
Rye, Winter	56	60-90	July—November
Rye Grass	24	25-35	February, June—August, October
Soybeans (Drilled)	60	30-60	May—August
Sudan Grass	40	15-30	April—July
Sunflower	22	3-6	May—July
Timothy	45	8-12	February, May—August, November
Vetch, Hairy Winter	60	30-50	August—November

MANNS' SUPERIOR FLOWER SEEDS

Flower Seeds for Particular Purposes

BORDER AND EDGING

Ageratum
x Alyssum, Saxatile
x Arabis, Alpina
x Bellis Perennis
x Campanula, Carpatica
Candytuft
Centaurea
x Cerastium
x Dianthus, Barbatus
x Heuchera
x Iberis, Sempervirens
Lobelia
Nasturtiums
Marigold
Pansy
x Papaver, Nudicaule
Petunia
x Phlox, Subulata
Portulaca
x Sedum
Verbena

FLOWERS FOR FRAGRANCE

Ageratum
Alyssum, Sweet
Antirrhinum
Candytuft
Centaurea
x Dianthus
Heliotrope
x Iris
x Mimulus
Mignonette
Nasturtium
Nicotiana
Pansy
Petunia
Scabiosa
Stock
Stock, Virginian
Sweet Peas
Verbena

EVERLASTINGS

Globe Amaranth
Helichrysum
Linaria
Statice

x Perennial Varieties.

PARTIAL SHADE

Alyssum, Sweet
x Anchusa Italica
x Anemone
Antirrhinum
x Aster, Hardy
x Candytuft, Iberis
Centaurea
China-Aster
Clarkia
x Foxglove or Digitalis
x Hibiscus, Moschata
x Lathyrus
Lupinus
x Lychnis, Chalcedonica
x Mimulus
Myosotis, Forget-me-not
Nicotiana
Pansy
Petunia
x Primula, English Cowslip
x Rudbeckia
Schizanthus
x Violas

FOR MOIST PLACES

x Heliotrope
x Hibiscus, Moschata
Mimulus
x Viola
x Wallflower

FOR POOR SOIL

Alyssum, Sweet
Amaranthus
Balsam
California Poppy
Calliopsis
Cornflower
Four-O'Clock
Marigold
Nasturtium
Poppy
Portulaca

ROCK GARDENS

See Annuals and Perennials Marked *

FOR DRY PLACES

x Aster
California Poppy
x Callirhoe
x Coreopsis
x Dianthus
Dimorphotheca
x Gypsophila, Paniculata
x Helianthus
x Hemerocallis
x Iris
Mesembryanthemum
Mimosa
x Papaver, Nudicaule
Phlox, Annual
x Phlox, Hardy
x Statice, Latifolium

TALL VARIETIES

Amaranthus, Caudatus
x Campanula, Pyramidalis
x Coreopsis
Cosmos
x Dahlia
x Digitalis
x Hibiscus, Moschata
x Hollyhock
Marigold, African
Nicotiana
Ricinus

FOR WINDOW AND PORCH BOXES

Ageratum
Alyssum
Begonia
Centaurea
Lobelia
Nasturtium
Oneothera
Pansy
Petunia
Phlox
Portulaca
Salvia Splendens
Thunbergia
Verbena
Vinca
Zinnia, Lilliput

ANNUAL FLOWER SEEDS

The ease of cultivation and the quickly effective results obtained from Annuals make them indispensable, as they are adaptable to an almost endless variety of arrangement.

Even in perennial borders, beds and rock gardens, annuals are very essential to bridge the span between periods of bloom of the perennials and to give desired color effects which are possible only with annuals. Many varieties can be started indoors early and transplanted giving continuous bloom from early summer until frost. Some sorts are very easily grown in late summer to produce plants for the sun-parlor or conservatory where they will blossom during the winter.

Annuals bloom more profusely than biennials or perennials because it is not necessary for them to store up food or build root systems for succeeding years; their business being to produce flowers and seeds abundantly the first year. For this reason it is advisable to cut the flowers before going to seed so that the plants will continue to bloom freely.

For Variety, Color, Fragrance, Economy Sow Annuals.

POTTED PLANTS

Potted plants in the following varieties are carried in stock at our store after May 10th.

Ageratum	Pansy
Alyssum	Petunia
Aster	Phlox
Calendula	Scarlet Sage
Coleus	Snapdragon
Coreopsis	Stock
Dianthus	Summer Poinsettia
Geranium	Verbena
Heliotrope	Vinca
Lantana	Wallflower
Lobelia	Zinnia

50c to $1.00 per doz. according to variety and size.

NOVELTIES. $1.50 per doz.
MARIGOLD. Crown of Gold.
CALENDULA. Orange Shaggy.
CORNFLOWER. New Jubilee Gem (Blue).
COSMOS. Sensation (Mixed Colors).
GAILLARDIA. Indian Chief, annual (Red).
ZINNIA. Double Mexican, Haageana (Mixed).
(No plants mailed or shipped.)

AGERATUM

*Splendid for bedding or pot culture, covered from June until frost with a mass of very attractive flowers of a tufted appearance. Very effective when contrasted with geraniums. **Large-flowered White, Blue or Mixed. Pkt., 10c; oz., 70c. Dwarf Varieties. Pkt., 10c; ½ oz., 50c.**

AGROSTEMMA—Rose of Heaven

COELI-ROSEA. A very showy old time favorite greatly admired; excellent cut flowers, grows 12 to 15 inches; blooms early. Color bright rose pink. **Pkt., 10c; oz., 25c.**

ALYSSUM

*Sweet Alyssum. Little Gem. Very popular border flower, coming into bloom six weeks after planting seed and requiring the least attention of all flowers. Very erect and dwarf, its white flowers greatly enhancing the beauty of any bed or border. Height 4 inches. **Pkt., 10c; oz., 70c.**

PROCUMBENS (Carpet of Snow)—Extra dwarf, very dense. **Pkt., 10c; ½ oz., 40c.**

Crego Aster

ANTIRRHINUM OR SNAPDRAGON

This border and bedding plant of long blooming season is now one of the best perennials suitable for flowering as an annual. The long showy spikes of curiously-shaped tubular flowers with spreading lobes and finely marked throats are fragrant as well as brilliantly-colored. They are very desirable for cutting as the blooms are borne well above the dark glossy leaves and keep fresh for a long time.

Tall Mixed, pkt., 10c; ¼ oz., 50c; oz., $1.50. Semi-Dwarfed Mixed, pkt., 10c; ½ oz., 45c.

SEPARATE COLORS: White; Appleblossom, (pink and White); Defiance (Scarlet); Fascination (deep flesh pink); Wallflower (Yellow Bronze); Luteum (Canary Yellow). Giant Type, pkt., 10c; ¼ oz., 75c.

NEW RUSTPROOF UNIVERSITY OF CALIFORNIA MIXTURE. Similar to the Majus Grandiflora type, but 75% rust-proof. Maximum Crimson, height 2½ to 3 ft. **Pkt., 10c; ⅛ oz., $2.00.**

ASTERS

Very popular because of their beauty and ease of culture. The varieties listed represent the finest Asters of the early, midseason and late types and will give a profusion of bloom from July to late October. Asters require good rich soil and during the growing period should be well supplied with water.

CALIFORNIA SUNSHINE. Flowers measure from 4 to 5 inches in diameter are half double and exhibit all the grace and beauty of the single Aster. The golden yellow ground tone of the quilled petals contrasts wonderfully with the outer petals. Forms a loosely curled circle which makes the flowers pleasing to the eye, fine for cutting. **Mixed, pkt., 10c; ¼ oz., 75c.**

ASTERS (Wilt Resistant)

CREGO. Flowers of immense size, 4 to 5 inches in diameter borne on very long stems. Plants are of strong branching growth, 2 to 2½ feet high. Separate colors, pkt., 10c; ⅛ oz., 25c. Mixed, pkt., 10c; ⅛ oz., 20c.

LATE BRANCHING. A handsome and very distinct variety resembling Japanese Chrysanthemums. The plants grow 1½ feet in height and width and the large full petaled blossoms are borne on long stems or branches. Comes into flower ten days later than other asters. Separate colors, pkt., 10c; ⅛ oz., 25c. Mixture, pkt., 10c; ⅛ oz., 20c.

AMERICAN BEAUTY. Mixed, pkt., 10c; ⅛ oz., 60c.

QUEEN OF THE MARKET. Branching habit, 1 foot high, large flowers borne on long stems, blooming in July. Mixed colors, pkt., 10c; ¼ oz., 30c; oz., $1.00.

Anchusa

AMARANTHUS

Very useful in borders of tall plants, among shrubs, or in centers of large beds. One type has large feathery plumes or sprays of rich crimson coloring while the other is grown exclusively for the brilliant-colored leaves.

CAUDATUS. (Love Lies Bleeding.) Plants of erect growth three to four feet high producing numerous feather sprays of rich crimson color. **Pkt., 10c; ¼ oz., 25c.**

MOLTEN FIRE. Very ornamental and beautiful; 4 feet tall; easily grown, leaves dark bronze, top of plant and centers of lower leaves, brilliant Poinsettia red. **Pkt., 10c; ½ oz., 65c.**

SALICIFOLIUS. (Willow-Leaved or Fountain Plant.) Grows two to three feet high, with long hanging flower heads and foliage of a deep purple coloring. **Pkt., 10c; ½ oz., 40c.**

SPLENDENS. (Rainbow Plant.) Beautiful variegated foliage with large crimson flower heads. **Pkt., 10c; ½ oz., 35c.**

TRICOLOR. (Joseph's Coat.) Similar to Splendens, having a single erect stalk of brilliantly colored foliage. **Pkt., 10c; ½ oz., 30c.**

ARCTOTIS (Blue-Eyed African Daisy)

GRANDIS. White petals tinged lilac with centers steel blue. A splendid and easily grown flower, 2 feet tall. Good for cutting. **Pkt., 10c; oz., 75c.**

ANCHUSA (Summer Forget-Me-Not)

CAPENSIS, ATROCOERULEA. A fine blue flower through late spring, summer, and fall. Easily grown. Height 2 feet. **Pkt., 10c; oz., 35c.**

BLUE BIRD. Vivid indigo blue, plants compact and of even growth. Stems about 18 inches. **Pkt., 10c; oz., 75c.**

BALSAM OR LADY SLIPPER

An easy growing annual of quick growth, producing numerous flowers resembling tiny roses. **Splendid double mixed, pkt., 10c; oz., 75c.**

BARTONIA (Golden Yellow)

AUREA. Large, showy flowers, 2½ inches in diameter; deep orange yellow. Blooms early, height 18 inches. **Pkt., 10c; oz., 70c.**

CALENDULA—POT MARIGOLD

Effective in beds or potted; showy, free-flowering, hardy annuals. Extra Double Orange King. **Pkt., 10c; oz., 30c.** Finest mixed, **pkt., 10c; oz., 25c.**

BALL'S GOLDEN. Glowing Yellow. **Pkt., 10c; oz., 30c.**

BALL'S, IMPROVED GOLDEN ORANGE. Long stemmed extra double, excellent for forcing. **Pkt., 10c; oz., 30c.**

ORANGE SHAGGY. Very distinct type having long narrow fringed petals, somewhat resembling rich deep orange Chrysanthemums, long stems, grows 18 in. high. **Pkt., 10c; ¼ oz., 75c.**

CAMPANULA—CANTERBURY BELLS

An old-fashioned favorite, stately, showy, and easily grown, hardy biennial. **Single and Double Mixed, pkt., 10c; oz., 50c.**

ANNUAL. Liberty Bell, violet-blue; **Angelus Bell,** deep pink. **Pkt., 10c; ⅛ oz., 70c.**

CANDYTUFT

This hardy annual is universally known and its clusters of small flowers are very beautiful and useful for cutting and borders.

FINEST HYBRID MIXTURE OF ALL COLORS. Pkt., 10c; oz., 40c.

CARNATION (Margaret)

Easily grown as an Annual producing large double blooms 4 or 5 months after sowing seed. Very fragrant. (See Perennials.)

CELOSIA OR COCKSCOMB

PLUMOSA. Feathered varieties mixed. **Pkt., 10c; oz., 50c.**

DWARF EMPRESS COCKSCOMB. Dark-leaved, bright crimson. **Pkt., 10c; ¼ oz., 75c.**

COCKSCOMB. Tall mixed. **Pkt., 10c; ½ oz., 50c.**

CHILDSII. (Chinese Woolflower.) Mixed—**pkt., 10c; ¼ oz., 30c.** Crimson—**pkt., 10c; ½ oz., 75c.**

CENTAUREA

CENTAUREA CYANUS OR BACHELOR'S BUTTON OR CORN FLOWER. Charming old-fashioned flowers. Free flowering habit, reseeding itself year after year. Useful as a cut flower, as well as a garden decoration. Double mixed. **Pkt., 10c; oz., 50c.**

CENTAUREA GYMNOCARPA OR DUSTY MILLER. One foot, foliage finely cut of silvery gray color, used for bedding. **Pkt., 10c; oz., 65c.**

CENTAUREA MOSCHATA OR SWEET SULTAN. Beautiful, sweet scented, artistic shaped flowers borne on long stems, when cut will last for several days. Mixed. **Pkt., 10c; ½ oz., 30c.**

CORNFLOWER, JUBILEE GEM—Dwarf plants freely blooming, vivid blue. **Pkt., 10c; ¼ oz., 75c.**

Calendula

Arctotis

Didiscus

Dianthus

CHRYSANTHEMUM

The annual Chrysanthemums are free-blooming, easily grown plants, having large flowers in a variety of brilliant colors, fine for cutting.

Mixed. Finest double hybrids. **Pkt., 10c; ¼ oz., 20c; oz., 70c.** Single. **Pkt. 10c; oz., 40c.**

CLARKIA

Very pretty, profuse flowering annuals, much used for edging. They grow from nine to eighteen inches high. Useful for hanging baskets. Double mixed. **Pkt., 10c; oz., 70c.**

CALLIOPSIS

Very handsome and showy plants with numerous flowers of brilliant colors, excellent for bouquets. Thrive well in any soil.

HYBRIDA-MIXED. Bi-color Annual. **Pkt., 10c; oz., 25c.**

COSMOS

One of the most satisfactory hardy annuals, flowering in late summer. Fine for cutting and easily grown. Can be sown anywhere and transplanted. Grows 4 to 6 feet high. Mammoth large flowered. **Single early flowering mixed, pkt., 10c; oz., 35c. Double early flowering mixed, pkt., 10c; ⅛ oz., 50c. Extra Early Double Crested, pkt., 10c; ⅛ oz., $1.00.**

EARLY KLONDIKE ORANGE FLARE. Bright vivid orange, very free flowering. **Pkt., 10c; ⅛ oz., 85c.**

SENSATION. (White and Shades of Pink Mixed.) Extremely early free blooming, flowers 4 to 5 inches, plants 4 ft. with rather heavy foliage. **Pkt., 10c; ¼ oz., 75c.**

DATURA

Large branching plants producing very large handsome, double or single, trumpet-shaped blossoms of exquisite fragrance. Excellent for late summer and autumn flowering. Mixed colors. **Pkt., 10c; ½ oz., 30c.**

DIANTHUS OR PINKS

These very beautiful and popular biennials flower freely the first year from seed, and in most locations they are quite hardy and produce larger flowers the second year.

***HEDDEWEGI.** Hybrids, very large double flowers. **Pkt., 10c; oz., 70c.**

SWEET WIVELSFIELD. Hybrid Type. Flowers large, somewhat similar to Sweet William. **Pkt., 10c; ¼ oz., 75c.**

LACINIATUS SPLENDENS. Large single brilliant crimson, white-eyed flowers borne profusely on neat dwarf compact plants. **Pkt., 10c; ¼ oz., $1.00.**

DIDISCUS—Blue Lace Flower

COERULEUS. Lavender, blue, lace-like flower; heads blooming profusely from June to September; 1½ feet tall. **Pkt., 10c; ½ oz., 75c.**

DIMORPHOTHECA

***AURANTIACA (African Daisy).** Very showy flowers for bed or border, bushy plants with orange-gold daisy-like blooms on long stems. **Pkt., 10c; ¼ oz., 35c.** Hybrid Mixed. **Pkt., 10c; ¼ oz., 35c.**

EUPHORBIA

HETERPHYLLA (Mexican Fire Plant). Grown by many as "Summer Poinsettia" as it produces a crown of brilliant red leaves. Rapid grower; 30 to 36 inches tall. **Pkt., 10c; oz., 60c.**
VARIEGATA (Snow on the Mountain). **Pkt., 10c; ½ oz., 25c.**

HELICHRYSUM-EVERLASTING FLOWER

Monstrosum. Double mixed, first quality, mixed. **Pkt., 10c; ¼ oz., 25c; oz., 75c.**

Helichrysums

Varieties marked * suitable for Rock Gardens.

Dimorphotheca

Larkspur

Gilia

GILIA

Exceedingly graceful and attractive, with tiny ball-shaped flowers, borne profusely on plants 15 to 24 inches tall; especially valuable for bees. Charming in flower border; a good cut flowers. Tall mixed. **Pkt., 10c; oz., 25c.**

GLOBE AMARANTH-GOMPHRENA

Similar in type to Bachelor's Button but having flowers of perfect globe shape. Mixed colors. **Pkt., 10c; oz., 25c.**

GODETIA (Satin Flower)

SEMI-DWARF MIXED. Resembles the Azalea both in form and color. Plants grow 1 foot high, and bloom in great profusion for nearly six weeks. Excellent for cutting and easily grown. **Pkt., 10c; oz., 50c.**

GYPSOPHILA (Baby's Breath)

***Single—(A).** Graceful plants with light fairy-like growth. A quick growing annual with myriads of small open bell-shaped flowers. These fine mist-like flowers are excellent for their delicate effect in bouquets. **Pkt., 10c.; oz., 25c.**

HELIANTHUS

CHRYSANTHEMUM FLOWERED. Double yellow, 7 feet. **Pkt., 10c; oz., 25c.**

IMPATIENS

HOLSTII MIXED. Free blooming plants, 1 to 2 feet tall. Somewhat resembling Balsam or Lady Slipper. Flowers various shades. **Pkt., 10c; 1/16 oz., $2.00.**

KOCHIA—SUMMER CYPRESS

Quick growing hedge plant about two and one-half feet high. Very symmetrical and attractive, the bushes taking on a distinctive red tinge late in the summer; for this reason often called Mexican Fire Bush. **Pkt., 10c; oz., 25c.**

LANTANA (Half Hardy)

One of the most desirable greenhouse or bedding plants, constantly in bloom, somewhat resembling Verbenas. Dwarf Hybrid Mixed. **Pkt., 10c; oz., $1.00.**

LARKSPUR

One of the best known of garden flowers and if planted in April will produce flowering plants by the first of July and continue to bloom until frost.

GIANT IMPERIAL DOUBLE MIXED. **Pkt., 10c; oz., 50c.** Separate colors. **Pkt., 10c; oz., 75c.**

GIANT HYACINTH FLOWERED MIXED. **Pkt., 10c; oz., $1.00.**

For Perennial Larkspur see Delphinium.

ROSAMOND. Tall double stock flowered, early, free flowering, pure deep pink; another All-American Gold Medal Winner. **Pkt., 10c; ¼ oz., 60c.**

LAVATERA—ANNUAL MALLOW

TRIMESTRIS MIXED. A free flowering variety, grows 2 feet tall bearing from July until fall a profusion of cup-shaped flowers of various shades. **Pkt., 10c; oz., 25c.**

LUPINUS

Free-flowering, easily grown annuals with long graceful spikes of richly colored pea-shaped flowers. Prefers a little shade, acid soil and cool weather.

DWARF ANNUAL MIXED. All colors. **Pkt., 10c; oz., 50c.**

HARTWEGII GIANTS MIXED. Enormous 3 foot spikes; 6 to 8 per plant; oxford blue or white. **Pkt., 10c; oz., 50c.**

KING BLUE, KING WHITE. New improved strain 3 to 4 ft. producing 4 to 6 flower spikes to a plant. **Pkt., 10c; ¼ oz., $1.00.**

MARIGOLD

French Marigolds are smaller than the African but are marked and spotted with varied shades of red and orange. The African is very large, double and in solid colors.

AFRICAN. Tall, double, extra mixed, first quality. **Pkt., 10c; oz., 75c.** Dwarf Double Mixed. **Pkt., 10c; oz., 50c.**

FRENCH. Dwarf double mixed. **Pkt., 10c; oz., 50c.**

GUINEA GOLD. Orange flushed with gold, height 2 to 2½ feet; flowers semi-double. **Pkt., 10c; ¼ oz., 50c.**

CROWN OF GOLD. Collarette type, chrysanthemum formed, fragrant, double. 2½-inch blooms; plants 2 ft. tall. **Pkt., 10c; ⅛ oz., 75c.**

SUNSET GIANTS. Largest known Marigolds, measuring 5 inches or more, plants 3 to 4 ft. tall, profuse bearer of fragrant flowers, coming about sixty percent double. **Pkt., 10c; ⅛ oz., 50c.**

LOBELIA

***ERINUS COMPACTA.** This charming variety forms compact bushes about 6 inches high and are covered with deep blue blooms throughout the season. Highly desirable for edging and garden decoration as well as for pot culture. **Pkt., 10c; oz., $1.00.**

PENDULA HAMBURIA. Trailing sort used for hanging baskets, vases and window boxes. **Pkt., 10c; ⅛ oz., 60c.**

MARVEL OF PERU—FOUR O'CLOCK

Large showy fragrant flowers, blooming the entire season. Succeed well in any ordinary garden soil in a sunny location. Mixed. **Pkt., 10c; oz., 20c.**

MESEMBRYANTHEMUM

***CRYSTALLINUM OR ICE PLANT.** Dwarf trailing annual plants. Flowers white prized for its distinctive icy foliage. **Pkt., 10c; oz., 50c.**

MIGNONETTE

Well known fragrant bedding or potting plant. Sowings made in April and again in July will result in a succession of bloom from early summer until frost.

GOLIATH. Golden yellow, large flowering. **Pkt., 10c; ¼ oz., 75c.**

MACHET GIANT MIXED. Large spikes, very fragrant. **Pkt., 10c; oz., 75c.**

Lobelia

Lupinus

Nigella

NASTURTIUM

GOLDEN GLEAM. New double sweet scented dwarf variety sure to become very popular. Pkt., 10c; oz., 30c.

TOM THUMB. The very popular dwarf or bedding variety, producing very showy large flowers. Our mixture contains all the newest hybrids as well as the distinct old varieties, all in proportion to assure a marvelous display of colors, ranging from cream white to the very darkest red. Pkt., 10c; ¼ lb., 20c; lb., 65c.

SPENCER. Choice mixed, very brilliant, in all shades of yellow, red and purple. Pkt., 10c; oz., 15c; ¼ lb., 35c; lb., $1.00.

DOUBLE GLEAM HYBRIDS. Large well-formed, sweet-scented double flowers in an extremely wide range of colors. Pkt., 10c; oz., 50c. **NEW SCARLET GLEAM.** Extremely large and lovely. Pkt., 10c; ½ oz., 50c. **NEW DWARF DOUBLE GOLDEN GLOBE.** Pkt., 15c; ½ oz., 50c.

NICOTIANA

AFFINIS. Gives a continuous display of flowers through the summer and autumn; plant 2 to 3 feet high. The blooms are white, sweet scented and measure 3 inches in diameter. Pkt., 10c; ¼ oz., 20c.

NIGELLA OR LOVE-IN-A-MIST

Free-flowering plant, 1 foot high, producing curious flowers surrounded by the finely cut foliage. Easily grown; useful for cutting.

DOUBLE BLUE. Pkt., 10c; oz., 25c.

ORNAMENTAL GRASS

COIX LACRYMA. (Job's Tears.) Pkt., 10c; oz., 25c.

PANSIES

These very popular and beautiful flowers may be sown in April or May for summer flowering or in August for early spring blooming. They thrive best in an open exposure, with protection during the winter.

BUGNOT'S GIANT. Flowers of enormous size, nearly circular in form and in a great variety of the most rare and handsome colors. Pkt., 10c; ⅛ oz., $1.50.

MAMMOTH EXHIBITION MIXTURE. True round and solid pansy form of giant size, each color an attraction. Pkt., 10c; ⅛ oz., $2.25.

MANN'S TRIUMPH OF THE GIANTS. (Frilled.) Finest for commercial or private use. Blooms enormous, most striking in brilliancy and beauty of color. Pkt., 10c; ⅛ oz., $1.50.

HIEMALIS. "Winter Flowering", extra early. Pkt. 10c; ¼ oz., 50c.

PETUNIAS

HYBRIDA GRANDIFLORA. Giants of California mixed. Pkt., 10c; 1/16 oz., $5.00.

HOWARD'S STAR. Finest striped colors mixed. Pkt., 10c; ¼ oz., 50c.

HYBRID FIMBRIATA. Giant flowering, choice mixed, extra selected. Pkt., 10c; ⅛ oz., $12.00.

ALL-DOUBLE FRINGED TRIUMPHANT MIXED. Pkt., 10c; 1/32 oz., $20.00.

DWARF BEDDING VARIETIES

HYBRIDA NANA COMPACTA. Dwarf extra fine free flowering sorts.

ROSY MORN. Pink white throat.

ROSE OF HEAVEN. Deep brilliant rose.

NORMA. Blue with white star.

SNOWBALL. Pure white.

Separate colors or mixture. Pkt., 10c; ¼ oz., 75c.

***PINK GEM.** Gold medal winner '34 "All American Selection," grows 5 inches high, globe shaped, entirely covered with deep pink blooms. Pkt., 10c; 1/16 oz., 75c.

Flaming Velvet—Rich, brilliant, velvety crimson, hybrida type. A Gold Medal Winner. Pkt., 10c; ⅛ oz., $9.00.

Martha Washington—Bright pink with darker center, ruffled; plants compact and covered with blooms. Pkt., 10c; 1/32 oz., $4.50.

Violacea—New beautiful deep purple. Pkt. 10c; ¼ oz., 75c.

BALCONY PETUNIAS

HYBRIDA PENDULA. For porch and window boxes, also excellent for bedding in solid masses of one or more colors. Large blooms produced in abundance. Deep Blue, Crimson, Rose, White and Mixed. Pkt., 10c; 1/16 oz., 75c.

PHLOX

Phlox makes a magnificient show in beds and masses where their brilliant and varied colors produce a gorgeous effect. Very easily raised and afford a bright display of flowers, all through the summer.

***DRUMMONDII.** Choice mixture, first quality. Pkt., 10c; ¼ oz., 35c.

DRUMMONDI GIGANTEA. Art shades. Mixture. Pkt., 10c; ⅛ oz., $1.50.

***STAR PHLOX.** (Cuspidata.) With star-shaped flowers, dwarf growth. Pkt., 10c; ¼ oz., 50c.

LARGE FLOWERING DWARF VARIETIES

***DEFIANCE.** Deep scarlet, very compact, free-flowering. Pkt., 10c; ¼ oz., $1.50.

***DWARF MIXED.** Selected colors, compact habit of growth, very effective in beds or borders. Pkt., 10c; ¼ oz., $1.00.

Varieties marked * suitable for Rock Gardens.

Stocks

Schizanthus

Salpiglossis

POPPIES

AMERICAN LEGION. Shirley type; large brilliant orange-scarlet with yellow anthers. **Pkt., 10c; oz., 25c.**

TULIP POPPY. One of the most brilliant annuals, the flowers are 3 inches in diameter and of a brilliant scarlet color, greatly resembling tulips. **Pkt., 10c; ½ oz., 60c.**

THE SHIRLEY. Special strain mixed; fine for bedding or cutting; single annual. **Pkt., 10c; oz. 25c.**

CARNATION FLOWERED. Splendid double fringed flower annual; mixed. **Pkt., 10c; oz., 25c.**

PEONY FLOWERED. Dwarf annual, very useful for bedding. **Pkt., 10c; oz., 25c.**

ESCHSCHOLTZIA. (California Poppy). Double mixed. Spreading plants 1 foot high, suitable for beds and borders, blooming from June until frost. Hybrid mixed. **Pkt., 10c; ¼ oz., 70c.**

PORTULACA—Mexican Rose

Very showy annual, easily grown, and very effective when massed in beds or edgings. A profusion of brilliantly colored flowers are produced throughout the summer. They thrive best in rather rich soil in a sunny situation.

***LARGE-FLOWERING EXTRA DOUBLE MIXED. Pkt., 10c; ⅛ oz., 85c.**

***LARGE FLOWERING SINGLE MIXED.** All colors. **Pkt., 10c; ¼ oz., 20c.**

RICINUS—CASTOR OIL BEAN

Ornamental plants of strong, stately growth, the foliage having the appearance of a tropical plant, very effective when planted in masses or as centers of Canna or Dahlia beds.

ZANZIBAR. Extra mixed. **Oz., 25c.**

SALPIGLOSSIS

Petunia-like flower borne on bushy stem, about 24 inches tall, various shades, which flower profusely during the summer. Mixed. **Pkt., 10c; ½ oz., 70c.**

SALVIA SPLENDENS OR SCARLET SAGE

Very popular bedding plant, extensively used for lawn and conservatory decoration, bearing long spikes of brilliant flowers from July to frost.

BONFIRE. Very dense flowering 2½ foot plants, excellent for beds or massing for color effect. **Pkt., 10c; ¼ oz., 75c.**

FIREBRAND. The most brilliant of all types. If sown in February produces flowers from June until frost. Its dwarf compact growth makes it especially suitable for edging lawns or borders. **Pkt., 10c; ⅛ oz., $1.50.**

SANVITALIA

***PROCUMBENS.** Useful border and edging plant of spreading nature, 8 inches tall, continuously producing an abundance of deep golden yellow double blooms resembling small zinnias. **Pkt., 10c; ¼ oz., 75c.**

SCABIOSA OR MOURNING BRIDE

Fine free-flowering plants for mixed borders and highly esteemed for cut flowers. The blooms are borne on long, erect stems in globular heads in colors ranging from white to dark maroon. Height 2 to 2½ feet. Double mixed. **Pkt., 10c; oz., 50c.**

SNAPDRAGON. See Antirrhinum, page 43.

SCHIZANTHUS

***MONARCH.** A plant noted for its wonderful variety of coloring and peculiarly shaped flowers, fine for cutting, graceful fern-like foliage, height about 18 inches. **Pkt., 10c; ¼ oz., 75c.**

SENSITIVE PLANT—MIMOSA

Curious and interesting annuals, with pinkish-white flowers; the leaves close and droop when touched or shaken. **Pkt., 10c; ¼ oz., 15c.**

STATICE

SINUATA. Choice mixed. Lovely bright Flower Heads. **10c per pkt.; oz., 25c.**

STEVIA

SERRATA. Grown out-doors or as a home plant for its dainty, fragrant, tiny white, star shaped flowers produced profusely. Excellent cut flower for combining with other varieties. **Pkt., 10c; ⅛ oz., 50c.**

STOCKS-10-WEEKS

DOUBLE EARLY GIANT IMPERIAL. (Bismarck 26-inch.) Mixed. **Pkt., 10c; ⅛ oz., 75c.**

DRESDEN PERPETUAL. These fine stocks will live outdoors for several years if protected with a fairly thick layer of straw, which must be lifted early in the spring. 20-inch. **Pkt., 10c; ¼ oz., 75c.**

LARGE FLOWERED DOUBLE MIXED. Pkt., 10c; ¼ oz., 75c.

DWARF DOUBLE LARGE FLOWERED MIXED. 12-inch. **Pkt., 10c; ¼ oz., 75c.**

***VIRGINIA.** Very early bedding variety. Six inch plants bearing a profusion of small flowers continuously during cool weather. Mixed. **Pkt., 10c; oz., 30c.**

SUMMER POINSETTIA

See Amaranthus Molten Fire also Euphorbia, Heterophylla.

TORENIA (Wish-bone Flower)

***FOURNIERI.** Violet and lavender colored flowers with deep yellow throats somewhat resembling elongated snapdragons. Plants grow a foot tall and bloom all summer until frost. **Pkt., 10c; ⅛ oz., $1.00.**

Varieties marked * suitable for Rock Gardens.

SWEET PEAS

CALIFORNIA GROWN SUCCESSFUL EVERYWHERE

One ounce for 50 feet of row.

THE SPENCERS are of exceptionally large size, the petals waved and frilled and the general effect remarkably graceful and effective. The plants are of vigorous growth and remain in bloom for a longer time than the Grandiflora sorts.

CULTURE.—Grow named varieties of the colors you like best; know them by name in your garden and you will derive much more pleasure from them. Early in the spring make a trench three to four inches deep in rich, mellow soil, so arranged that no water can stand in it and plant the seed in the bottom, covering at first only one inch deep. When the plants are two inches high, cultivate; and as they grow, gradually fill in the trench. When the plants are about five inches high they should be supported by poultry netting, strings or brush. Water should be applied thoroughly once or twice a week early in the morning or in the evening. The blooms should be picked before they form pods or the plants will soon stop flowering. The following have been selected from hundreds of varieties, as being those of the highest quality in their respective classes.

SPENCER VARIETIES

AMBITION. Rosy lavender.

CAPTAIN BLOOD. Brilliant blood scarlet, veneered copper.

COMMANDER GODSALL. Large, navy blue.

DEBUTANTE. Salmon shaded coral.

GIGANTIC. White, black seeded, best white. **Pkt., 10c; oz., 75c; ¼ lb., $2.25; lb., $7.50.**

GLENEAGLES. Very large, pale blue lavender.

GOOD CHEER. Deep Begonia rose.

MAGNET. Bright cream pink.

PINKIE. Large rose pink.

PRINCE OF ORANGE. Best deep orange.

THE SULTAN. Black velvety maroon.

WHAT JOY. Deep, rich cream.

Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., $2.50 (except as noted).

EARLY FLOWERING SPENCERS

Florists' varieties for early forcing—can also be grown successfully outdoors, coming into bloom a month earlier than original Spencers.

ALL WHITE. Largest pure white

BLUE BONNET. Best clear blue. **Pkt., 10c; oz., 50c; ¼ lb., $1.35; lb., $4.50.**

HARMONY. Clear lavender. **Pkt., 10c; oz., 50c; ¼ lb., $1.35; lb. $4.50.**

VALENCIA. Bright orange, sunproof, long stems.

VULCAN. Vivid scarlet, sunproof. **Pkt., 10c; oz., 50c; ¼ lb., $1.35; lb., $4.50.**

ZVOLANEK'S ROSE. Bright rose pink.

PRICES—Pkt., 10c; oz., 50c; ¼ lb., $1.50; lb., $5.00.

SWEET PEA MIXTURES

Our Sweet Pea Mixtures are combined of carefully considered proportions of varieties which have proven themselves to be the very choicest of their respective types and colors. These mixtures cannot be equaled in their beauty and flowering qualities.

MANNS' SUPERB SPENCER MIXTURE. Pkt., 10c; oz., 15c; ¼ lb., 35c; lb., $1.25.

URSINIA

ANETHOIDES. Rich orange colored daisy like flowers with centers varying from red to purple, spangled with jewel-like dots. Very free flowering from June until frost. Plants 2 feet, tall bushy with mass of blooms held well above foliage. Excellent for cutting or garden decoration. **Pkt., 10c; ⅛ oz., 75c.**

VENIDIUM

FASTUOSUM. Very showy plant 2 to 3 feet tall, producing 3 inch diameter brilliant orange flowers with dark centers. The soft gray woolly foliage is very attractive. Pkt., 10c; 1/16 oz., $1.00.

VERBENA

One of the finest bedding plants and also suitable for borders, with its heads of brilliantly colored flowers, producing one mass of bloom throughout the summer. Seeds may be planted as soon as the ground can be worked or earlier indoors and transplanted to the beds in April or May. They succeed in almost any good garden soil.

HYBRID MIXED. Extra large flowered, brilliant colors and vigorous. **Pkt., 10c; ¼ oz., 25c.**

***HYBRID COMPACTA MIXED.** Very compact and erect in its habit of growth; excellent border variety. Pkt., 10c; ¼ oz., 75c.

Varieties marked * suitable for Rock Gardens.

VINCA (Periwinkle)

Very attractive bushy plants with luxuriant glossy green foliage, producing in abundance handsome flowers that bloom freely all summer. Excellent for borders, summer bedding and window boxes, one foot tall. Choice mixed. Pkt., 10c; oz., $1.00.

ZINNIAS—DOUBLE

We have given particular attention to these annuals, developing them into perfection unsurpassed.

COLOSSAL GIANT DOUBLE MIXED. Pkt., 10c; ½ oz., 75c.

DAHLIA FLOWERED IN SEPARATE COLORS

CRIMSON MONARCH. Deep crimson.

DREAM. Deep lavender purple.

GOLDEN DAWN. Golden yellow.

ILLUMINATION. Deep soft pink.

POLAR BEAR. Pure white. Pkt., 10c; ¼ oz., 50c; oz., $1.50.

SCARLET FLAME. Bright scarlet.

DAHLIA FLOWERED MIXED. Pkt., 10c; oz., $1.25.

FANTASY. Large, well-rounded, informal graceful Chrysanthemum shaped blooms on long stems in the usual range of zinnia colors. Pkt., 10c; ⅛ oz., 85c.

DOUBLE LILLIPUT

Dainty profuse blooming type, 12 to 15 inches tall; flowers 1 inch in diameter, very popular. Orange, Salmon Rose, Lilac, Scarlet, Mixed. Pkt., 10c; oz., $1.25.

Dahlia Flowered Zinnia

VINES

BALLOON VINE. (Cardiospermum.) Very graceful, rapid grower, producing inconspicuous flowers, foliage light green. Pkt., 10c; oz., 20c.

BALSAM APPLE. (Balsamina.) Pkt., 10c; ¼ oz., 25c.

BALSAM PEAR. (Momordica Charantia.) Fine for trellises or low fences. Rapid growing vines with lobed light green leaves and beautiful fruits of a rich golden yellow color, which when ripe, open up, disclosing the seeds enclosed in a carmine covering. Pkt., 10c; ¼ oz., 25c.

CARDINAL CLIMBER. (Ipomae Quamoclit Hybrida.) An easily grown climber developing to perfection in sandy loam soil. The brilliant scarlet flowers are borne profusely. The leaves resemble those of a fine Japanese Mahle. Pkt., 10c; ½ oz., 40c.

CANARY BIRD FLOWER. (Nasturtium peregrinum.) A most beautiful climber of rapid growth with handsome fringed, rich yellow flowers and fine delicate foliage. Pkt., 10c; ¼ oz., 15c.

COBAEA SCANDENS. Of rapid growth, with fine foliage and large bell-shaped flowers of a beautiful violet blue color. Pkt., 10c; ¼ oz., 35c.

WILD CUCUMBER VINE. (Echinocystis lobata.) A quick-growing and attractive climber, will grow 20 feet in six weeks, the large foliage affording plenty of shade. Covered during the summer and fall with sprays of small white flowers. Pkt., 10c; oz., 20c.

CYPRESS VINE. (Ipomoea quamoclit.) Beautiful and very popular, slender vine, with fern-like foliage and a mass of small star-shaped flowers. Mixed colors. Pkt., 10c; ¼ oz., 15c.

GOURDS. A large and interesting class producing a great variety of curious fruits, many of which are peculiarly marked. Pkt., 10c; oz., 35c.

KUDZU VINE. (Pueraria thumbergiana.) Perennial. One of the most rapid growing of all climbers, providing a dense screen of large rich green leaves. Pkt., 10c.; ¼ oz., 25c; oz., 75c.

HYACINTH BEAN. (Dolichos.) Of extra rapid growth, introduced from Japan and very much superior to the old-fashioned flowering bean. Darkness, purple flower; daylight, white flowers; or mixed. Pkt., 10c; oz., 30c.

JAPANESE HOP VINE. (Humulus Japonicus.) Where an attractive climber is desired that will stand rough usage there is nothing better. Variegated leaves. Pkt., 10c; ¼ oz., 20c.

MOON FLOWER. (Ipomoea mexicana.) Very pretty, rapid growing vine, with handsome trumpet-shaped flowers. Pkt., 10c; ¼ oz., 20c.

MORNING GLORY. (Convolvulus.) This splendid and very popular climber needs no introduction. Our Giant Japanese Imperial Mixture is unsurpassed. Pkt., 10c; oz., 15c.

CLIMBING NASTURTIUM. Flower and foliage similar to dwarf Nasturtiums; the growth, however, being much more vigorous. 5 to 7 feet. They may be used for porches or urns or left to run freely over the ground. Choicest Mixture, oz., 10c; ¼ lb., 30c; lb., 75c.

PASSION FLOWER. (Passiflora.) A most interesting and well known climber, bearing singularly beautiful flowers. Pkt., 10c; ½ oz., $1.00.

SMILAX. (Medeola.) This popular Boston Smilax is a most desirable window vine, on account of its charming, glossy green, graceful foliage. Perennial, splendid for greenhouse or conservatory. Pkt., 10c; ¼ oz., 35c.

THUNBERGIA. (Black-eyed Susan.) Free-flowering and of rapid growth. May be trained on a slender trellis or allowed to run freely over the ground to cover bare spaces. Pkt., 10c; ¼ oz., 35c.

SCARLET RUNNER. Of very rapid growth, producing clusters of showy bright scarlet pea-shaped blossoms, followed by edible beans of very fine quality. Pkt., 10c; lb., 50c.

CINNAMON VINE. Hardy climber, small white flowers. Strong tubers, 15c each.

MADEIRA VINE. Rapid growing climber. Tubers, 15c each. $1.50 per doz.

CLEMATIS PANICULATA. (White.) One of the most beautifully hardy climbers; of strong rapid growth, producing a profusion of deliciously fragrant flowers. Roots, 50c each.

JACKMANII. A perennial climber with very delightful purple flowers. Roots, 75c each.

PERENNIAL FLOWER SEEDS

Perennials are used extensively in old fashioned gardens, hardy borders and rock gardens. They are easily grown and when once established become increasingly beautiful year after year. Care should be taken in selecting varieties according to their color, height and season of bloom.

The seeds may be sown indoors or in hot beds early in the spring and transplanted to their permanent locations when three or four inches tall. Very satisfactory results can also be obtained by sowing the seeds early in August and shading from excessive heat by using lath or burlap screens. It is well to give young plants winter protection the first year.

The following list includes those varieties which are most popular because of their beauty, usefulness and adaptability to local climatic conditions.

ACHILLEA—Ptarmica

THE PEARL. Small double white flower in great profusion. 2 feet tall. Blooms freely during July and August. An excellent perennial for cutting, and very fine for the foreground of shrubs and for borders. **Pkt., 10c; 1/16 oz., 60c.**

ROSEA (Kelwayi). Pink. **Pkt., 10c; ¼ oz., 35c.**

ACONITUM (Monkshood or Helmet Flower)

FISCHERI. A dwarf variety growing 18 inches high, with large pale blue flowers in September and October. **Pkt., 10c; ⅛ oz., 50c.**

ALYSSUM

***SAXATILE—Compactum.** An excellent border plant 6 to 9 inches tall covered with bright sulphur-yellow flowers during early spring. **Pkt., 10c; ¼ oz., 40c; oz., $1.25.**

ANCHUSA ITALICA (Alkanet)

DROPMORE. One of the finest blue flowered plants growing 4 feet tall. Magnificent spikes from June until frost. An excellent plant for the background to hide walls or fences. **Pkt., 10c; oz., 75c.**

ANEMONE

***CORONARIA ST. BRIGID.** Blooms early in the spring, grows about 10 inches tall, and has a variety of colors. Scarlet, Violet or Mixed. **Pkt., 10c; ⅛ oz., 40c.**

AQUILEGIA OR COLUMBINE

As a cut flower the long spurred Aquilegias are the daintiest of our outdoor grown flowers. Very hardy, blooming profusely early in the season and remaining in bloom for a considerable period. **LONG SPURRED GIANT HYBRIDS. Pkt., 10c; ⅛ oz., 75c.**

MRS. SCOTT ELLIOTT HYBRIDS. The world's finest strain, consisting of the most wonderful colors, with very long spurred flowers. **Pkt., 10c; ⅛ oz., 50c.**

***CAERULEA—The Rocky Mountain Columbine.** Blue and white flowers, 18 inches tall, blooms during June. **Pkt., 10c; ⅛ oz., $1.00.**

ARABIS—Rock Cress

***ALPINA.** An excellent early blooming dwarf perennial, covered with a mass of white flowers. It makes a fine border to taller perennials. Blooms during April. **Pkt., 10c; ½ oz., 60c.**

ARMERIA—Sea Pink

***FORMOSUM HYBRIDS.** Dwarf growing plants with grassy leaves and clover-like flower heads from May until July in various shades of pinks. **Pkt., 10c; ⅛ oz., 50c.**

AUBRIETIA

***LARGE FLOWERING HYBRIDS.** Excellent dwarf spreading plants with rose, blue and lilac, blooms early in spring. **Pkt., 10c; ¼ oz., 75c.**

Varieties marked * suitable for Rock Gardens.

Anemone

BELLIS—English Daisy (Double)

Favorite perennials producing their handsome double flowers in the spring. Rich soil and a cool situation suit them best.

GIANT RED. Extra large double red flowers. **Pkt., 10c; ⅛ oz., $1.00.**

GIANT ROSE. Extra large double rose flowers from April on. Prefers a cool, shady place. **Pkt., 10c; ⅛ oz., $1.00.**

GIANT WHITE. Beautiful white double flowers produced on compact and sturdy plants. **Pkt., 10c; ⅛ oz., $1.00.**

DOUBLE MIXED. This mixture includes a well-balanced proportion of all colors. **Pkt., 10c; ⅛ oz., 50c.**

GIANT TUBULOSA. With quilled petals. **Pkt., 10c; ⅛ oz., 65c.**

Aquilegia

BOSTON IVY

AMPELOPSIS VEITCHII. Popular wall ivy with three lobed leaves which turn to a bright red color late in the fall. **Pkt., 10c; oz., 50c.**

CACTUS

Good Mixture. **Pkt., 10c; ⅛ oz., 65c.**

CALCEOLARIA (Tender)

HYBRIDA GRANDIFLORA. Produces a mass of pocket-like flowers of various shades through the spring and summer. Fine for the greenhouse. **Pkt., 50c; 1/64 oz., $5.00.**

CALLIRHOE—Poppy Mallow

***INVOLCRATA**—Rosy crimson flowers borne profusely from July until October. Of trailing habit, does well even in poor and sandy soil. **Pkt., 10c; ¼ oz., 50c.**

CAMPANULA—CANTERBURY BELLS

CALYCANTHEMA. Tall, erect growing plants, completely covered with large cup and saucer-shaped flowers during May and June. A hardy Biennial. Blue, Rose, White and Mixed. **Pkt., 10c; ⅛ oz., 50c; ½ oz., $1.50.**

CAMPANULA (Single)

***CARPATICA.** Hare Bells. Flowers clear blue and white, held erect on wiry stems 8 inches high, begins blooming in July until October. **Pkt., 10c; ½ oz., 50c.**
PYRAMIDALIS. Chimney Bells. Produces spikes 4 to 6 feet, covered with star-shaped flowers during entire summer. Blue and White. **Pkt., 10c; ½ oz., $1.00.**
PERSICIFOLIA. Peach Bells. Elegant blue and white flowers, height 2 feet. **Pkt., 10c; ⅛ oz., 50c.**

CARNATIONS

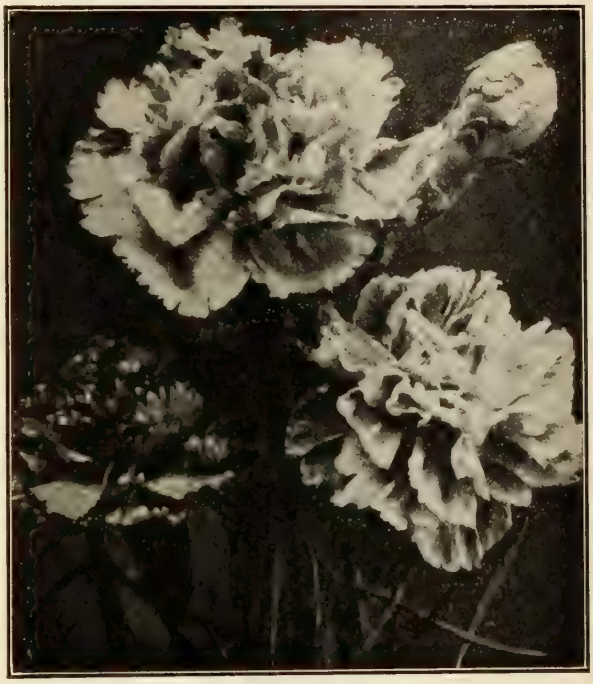
With protection these well known half-hardy perennials can be wintered over outdoors. When planted early they will begin to bloom in about four months and continue until late in the fall. For winter blooming they should be cut back by removing the flower shoots early in the fall and transplanted to pots and kept in a cool room.

EARLY DWARF VIENNA. Mixed Dwarf, compact plants about a foot tall, displaying an excellent range of bright colors. **Pkt., 10c; ¼ oz., 75c.**

MARGUERITE. Half Dwarf, choice double mixed. **Pkt., 10c; ¼ oz., 75c.**

PERPETUAL (Famous Chaubaud Type). Choicest mixture. **Pkt., 10c; ¼ oz., 85c.**

Calceolaria



Marguerite Carnations

CANDYTUFT

***IBERIS SEMPERVIRENS.** Large heads of white flowers, covering the plants during May; 1 foot. **Pkt., 10c; ¼ oz., 90c.**
GIBRALTARICA. Much like the above, color of lilac rose. **Pkt., 10c; ¼ oz., 45c.**

CENTAUREA

MONTANA. Showy, thistle-like, blue flowers on sturdy plants, growing 2 feet tall. Blooms freely from late April until late June. **Pkt., 10c; ½ oz., 30c.**

CERASTIUM—Snow in Summer

TOMENTOSUM. A valuable creeping plant, with silvery white foliage and snowy white star-shaped blooms covering the plants during May and June. When in full bloom the plants appear like a bed of snow. **Pkt., 10c; ¼ oz., 30c.**

CHRYSANTHEMUM

Perennial Chrysanthemums are grown chiefly from divisions of roots of the Japanese varieties and cultivated for late fall cut flowers. Plants available June 1st.

CINERARIA (Greenhouse)

HYBRIDA. Extra large flowered, first quality mixture. **Pkt., 50c; 1/16 oz., $6.00.**

MARITIMA. Entirely different from the popular Cineraria, being most useful for bedding. Silver-leaved; also called Dusty Miller. **Pkt., 10c; oz., 90c.**

COLEUS (Tender)

An attractive foliage plant for ornamental bedding. Finest hybrid mixture. **Pkt., 10c; 1/16 oz., 90c.**

COREOPSIS—Golden Wave

GRANDIFLORA, fl. pl. This variety produces a large number of double and semi-double broadly expanded golden yellow flowers. The plants bloom freely during late spring and summer. Grows about 2 feet tall. **Pkt., 10c; ¼ oz., 25c.**

CYCLAMEN (Tender)

Universally admired, tuberous rooted house plants with beautiful foliage and richly colored flowers. Sow the seed in light rich soil, barely covering, and keep at a temperature of 50 to 60 degrees F. Water freely until well started. Seeds sown in spring, by autumn will produce little bulbs, which placed in pots will bloom the following spring.

AMSTERDAM GIANTS, Florists Prize Mixture. Pkt., 10c; 100 seeds, $2.00; 1/32 oz., $3.00.

DAHLIA (Half Hardy)

Seed should be planted very early indoors and the plants transplanted in May or June. Most of the plants will bloom the same year. The roots should be dug before freezing weather and stored in sand in a cool place.

CACTUS HYBRIDS. Extra double mixed. **Pkt., 10c; ⅛ oz., $3.50.**

SINGLE MIXED. **Pkt., 10c; oz., 90c.**

DELPHINIUM (Hardy Perennial Larkspur)

One of the finest hardy perennials. Very effective in beds, masses or borders. To prolong the season of bloom cut the old flower stems off after they have faded and new shoots will produce flower heads successively. Sow Delphinium seed as soon as it is received to insure strong germination.

GOLD MEDAL HYBRIDS. A selected English variety, producing long spikes, completely covered with large blooms. The colors range from sky-blue to a deep pansy violet. **Pkt., 10c; ⅛ oz., 50c.**

NUDICAULE. Deep scarlet. **Pkt., 10c; ⅛ oz., $1.25.**

WREXHAM HOLLYHOCK STRAIN. Light and deep blue shades. **Pkt., 10c; 1/16 oz., $1.00.**

DIANTHUS—Hardy Pinks

FLORISTS PERPETUAL. Large clusters, fragrant, very useful for cut flowers. Mixed. **Pkt., 10c; oz., $1.00.**

*PLUMARIUS—Single Mixed. Large showy single flowers in wide range of colors during May and June. 1 foot tall. **Pkt., 10c; ¼ oz., 35c.**

*PLUMARIUS—Double Mixed. Of very compact growth, double flowers in many colors, during May and June. 1 foot tall. **Pkt., 10c; ¼ oz., 85c.**

FEVERFEW (Matricaria)

Beautiful, small, white button-like double flower heads. Plants of husky growth with very finely cut dark green foliage; desirable for bedding. **Pkt., 10c; ½ oz., 75c.**

FORGET-ME-NOT—Myosotis

*BIENNIAL ALPESTRIS. Mixed. **Pkt., 10c; ¼ oz., 25c.**

*PALUSTRIS. Perennial. This is the Marsh Forget-Me-Not with its attractive heavy dark green foliage and bright blue flowers. Plant in the shade. **Pkt., 10c; ¼ oz., 50c.**

HYBRIDA, Ruth Fisher. Biennial. Large flowered, dwarf. **Pkt., 10c; 1/16 oz., $1.50.**

FOXGLOVE OR DIGITALIS

In stately appearance the Foxgloves occupy a prominent place among our hardy plants. They succeed well in an average garden soil. Early summer sowings do best.

MONSTROSA FINE MIXED. This mixture of the Giant Foxgloves is sure to please every gardener. It contains a wide range of rich colors. **Pkt., 10c; oz., $1.00.**

THE SHIRLEY. This is a really beautiful new strain of Foxglove, bearing long, stately spikes closely set with large open bells of many bright colors. Spotted, especially showy and strong growing. **Pkt., 10c; oz., 75c.**

GAILLARDIA

GRANDIFLORA (Blanket Flower). Beautiful large crimson flowers with contrasting yellow tips; 2 feet tall. Blooms from late spring until frost. Easily grown. **Pkt., 10c; ¼ oz., 20c; oz., 60c.**

PORTOLA HYBRIDS. A new strain of Gaillardia of strong growth. The long stemmed, well-shaped flowers are golden yellow, marked with rich scarlet. Most outstanding. **Pkt., 10c; ¼ oz., 40c.**

GERBERA (Jamesoni Hybrids)

NEW AFRICAN TRANSVAL DAISY, producing wonderfully beautiful daisy-like blooms of large size, in a wide range of colors. Grown either as a greenhouse plant or propagated in hot-beds and set out early in May. Very profitable cut flower for florists. **Pkt., 10 seeds, 10c; 100 seeds, 75c; 1,000 seeds, $5.00.**

GEUM—Coccineum

*MRS. BRADSHAW. Graceful, double orange-scarlet flowers produced during the summer on plants 2 feet tall. **Pkt., 10c; ⅛ oz., 50c.**

*LADY STRATHEDEN. Fine, double, golden yellow flowers borne on graceful stems. Blooms during the summer; 2 feet. **Pkt., 10c; ⅛ oz., 60c.**

Delphinium

Gerbera

Feverfew

Varieties marked * suitable for Rock Gardens.

Sweet Rocket

Gaillardia

Foxglove

GYPSOPHILA—Baby's Breath

SINGLE (PANICULATA). Tiny white flowers borne on slender stems. The plants are simply covered with blooms during June and July; 2½ feet. **Pkt., 10c; oz., 30c.**

DOUBLE BABY'S BREATH. Small, double, white flowers, carried on slender wiry stems. Makes a fine show during June and July. **Pkt., 20c; ⅛ oz., $2.00.**

***REPENS.** An excellent variety for rock-garden planting because of its prostrate growth. The plants are covered with small white flowers during June and July; 4 inches tall. **Pkt., 10c; ¼ oz., 50c.**

HELIANTHEMUM (Rock-Rose)

***MURABILE MIXED.** Dwarf evergreen, blooms May and June, dry sunny locations; 1 foot. **Pkt., 10c; ½ oz., 50c.**

HELENIUM (P)

HOOPESII. Yellow with orange disk in center. Blooms in August and September. **Pkt., 10c; ½ oz., 75c.**

HELIOPSIS—Hardy Zinnia

LEMOINE STRAIN. The double golden yellow flowers resembling a Dahlia are produced on stalks 3 to 4 feet tall during the entire summer. Excellent for cutting. **Pkt., 10c; ¼ oz., 75c.**

HELIOTROPE (Half Hardy)

GIANT LEMOINI, mixed. Pkt., 10c; ¼ oz., 50c.

HESPERIS MATRONALIS
(SWEET ROCKET)

Old fashioned garden plants growing 2 to 3 feet high, bearing spikes of white or purple flowers. Execellent for planting in a border or among shrubbery. **Pkt., 10c; oz., 25c.**

HEUCHERA—CORAL-BELLS

SANGUINEA. Deep red spikes, blooms from May until July. **Pkt., 10c; 1/16 oz., $1.75.**

HIBISCUS—MALLOW MARVELS

GIANT GOLDEN BOWL. Hardy if protected. **Pkt., 10c; ¼ oz., 35c.**

GIANT MIXED. Canes growing 4 feet tall with large flower spikes in Crimson, Pink and White, blooms from May until July. **Pkt., 10c; ¼ oz., 50c.**

HOLLYHOCKS

Chaters Double Choice Mixture. Pkt., 10c; ¼ oz., 40c.
Chaters Single Mixed. Large, very artistic blooms. **Pkt., 10c; ¼ oz., 20c.**

IBERIS—See Candytuft (Perennial)

INCARVILLEA

DELAVAYI. Bright rosy purple flowers, plants 15 to 18 inches tall. June and July. Succeeds well in sunny border. **Pkt., 10c; ⅛ oz., $1.25.**

LATHYRUS—Perennial Sweet Peas

Hardy climber with branches 8 to 10 feet long, blooms freely during the summer. Excellent for cutting.

PINK BEAUTY. Brilliant Rose Pink. **Pkt., 10c; oz., $1.00.**

CRIMSON. Brilliant. **Pkt., 10c; oz., $1.00.**

GIANT WHITE PEARL. Clusters of beautiful white flowers. **Pkt., 10c; oz., $1.25.**

MIXED. All three colors. **Pkt., 10c; oz., 50c.**

LINARIA—Kenilworth Ivy

***CYMBALARIA.** Small lilac blue flowers, are born on a charming neat trailing plant. **Pkt., 10c; ¼ oz., 50c.**

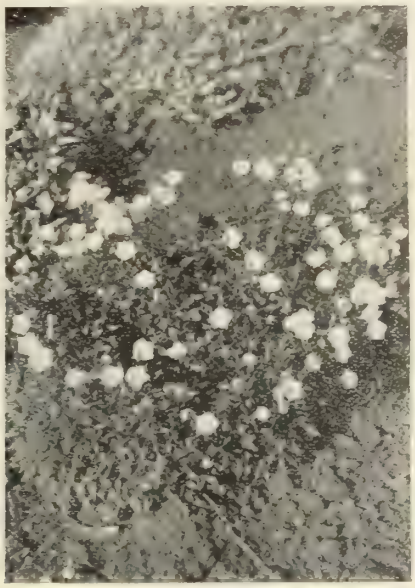
LINUM—Perennial Flax

***PERENNE.** Beautiful light blue flowers borne profusely on plants 2 feet tall from July until August. The blooms last only one day but they are produced continuously. **Pkt., 10c; oz., 25c.**

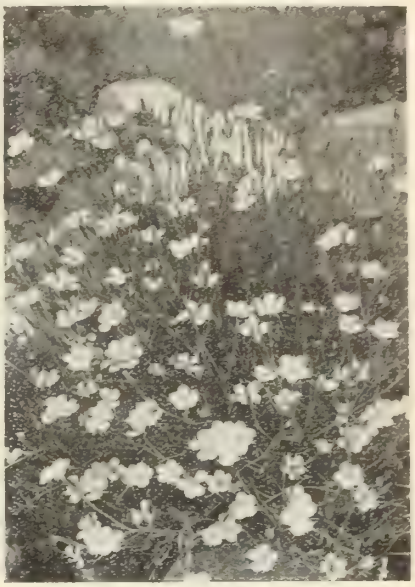
LUNARIA—Honesty

Biennial plant having round, silvery, paper-like seed-pods which are dried for winter bouquets. **Pkt., 10c; ¼ oz., 25c.**

Physostegia



Platycodon



Saponaria

LUPINUS—Hardy Lupines

POLYPHYLLUS. Blue. A very popular sort, bearing clear deep azure blue flowers from June until September. **Pkt., 10c; oz., 25c.**

MOERHEIMI. A very showy spike graced with rose and white flowers. **Pkt., 10c; ¼ oz., 25c; oz., 75c.**

SUNSHINE. A beautiful variety bearing a profusion of bright yellow flower spikes, arboreus habit. **Pkt., 10c; oz., 60c.**

LYCHNIS

Elegant hardy perennials of easy culture, excellent for massing in large beds or borders.

ARKWRIGHTII. Splendid hybrids, free flowering. **Pkt., 10c; ¼ oz., 75c.**

CHALCEDONICA (Maltese or Jerusalem Cross). Fine scarlet cross-like flowers, 2 feet; July. **Pkt., 10c; ¼ oz., 25c.**

VISCARIA SPLENDENS (Catchfly). Bright rose red; 1 foot. **Pkt., 10c; ¼ oz., 25c.**

LYTHRUM

SALICARIA. Fine long heads of rich purplish red flowers from early July until late September, 2 to 3 feet tall. **Pkt., 10c; ½ oz., $1.25.**

MIMULUS (Half Hardy)

Showy, profuse flowering plants, fine for greenhouse or moist shady situations, blooming the first year from seed if sown early; 1 foot high. Often used for hanging baskets or window boxes.

MOSCHATUS OR MUSK PLANT. Fragrant foliage. Seed extremely small. **Pkt., 10c; ⅛ oz., $2.00.**

NEPETA

***MUSSINI.** Pale mauve flowers, May-September. 1 foot. Aromatic. **Pkt., 10c; ⅛ oz., 50c.**

OXALIS

TROPAELOIDES. Yellow. **Pkt., 10c; ⅛ oz., 75c.**

PENSTEMON

GIANT FLOWERED. Choice mixed. Beautiful bell-shaped flowers on 18-inch spikes. **Pkt., 10c; ⅛ oz., $1.00.**

PHLOX

DECUSSATA—New Hybrids. 2 to 3 feet high; flowers in all bright colors; sow seeds late in fall and they will germinate in the spring. **Pkt., 10c; ¼ oz., 75c.**

PLATYCODON—Chinese Bellflower

GRANDIFLORA. Large showy, deep blue flowers on 20-inch spikes, are produced all summer. A splendid plant for the hardy border. **Pkt., 10c; ⅛ oz., 25c.**

***MARIESI.** Deep blue flowers in June and July; 1 foot. **Pkt., 10c; ⅛ oz., $2.00.**

PHYSALIS—Chinese Lantern Plant

FRANCHETI. Dense bushes about 2 feet high, producing freely, bright, orange-scarlet, lantern-like fruits. **Pkt., 10c; ½ oz., 50c.**

PHYSOSTEGIA—False Dragon Head

A very pretty hardy perennial; dense bushes, bearing freely delicate tubular flowers; 3 to 4 feet; July-August.

VIRGINICA. Pink. **Pkt., 10c; ¼ oz., $1.25.**

POPPIES

ORIENTAL SCARLET. The blooms are an intense shade of scarlet red having a conspicuous black blotch on each petal, borne on 2½ foot stems, during June and July. **Pkt., 10c; ¼ oz., 40c.**

PRINCESS VICTORIA LOUISE. An exquisite variety with mammoth flowers of bright salmon rose, very free bloomer. **Pkt., 10c; ⅛ oz., 40c.**

CHOICEST MIXED. It includes many bright shades as is found in Oriental Poppies. **Pkt., 10c; ¼ oz., 50c.**

ROMNEYA COULTIN MATILIJA. (Hardy California Tree Poppy.) 4 to 5 feet. Flowers white, 5 inches in diameter, very fragrant. **Pkt., 10c; ⅛ oz., $1.00.**

POPPY NUDICAULE—Iceland Poppies

Great numbers of flowers on slender stems 1 foot long throughout the season.

***COONARA.** Salmon shades. A particularly fine strain of a lovely pink shade of latest introduction. **Pkt., 20c; ⅛ oz., 65c.**

***SUNBEAM MIXED.** Embracing all the graceful, gaily, colored flowers in white, yellow and orange found in Iceland Poppies. **Pkt., 10c; ¼ oz., 75c.**

PRIMULA—Primrose

***AURICULA.** Many bright colors, including orange, copper, brown, and other pastel shades. An excellent hardy Primrose for the border; 6 inches tall. Blooms during spring. **Pkt., 10c; 1/16 oz., $1.00.**

***VULGARIS (English Primrose).** Large rich yellow flowers during the spring; 6 to 8 inches tall. A favorite variety. **Pkt., 10c; 1/16 oz., 75c.**

COWSLIP OR OENOTHERA. Evening Primrose. **Pkt., 10c; ⅛ oz., 80c.**

CHINESE PRIMROSE. (Primula chinensis fimbriata.) Popular winter blooming pot plant. Special florist strain, giant double mixed. **Pkt., 10c; 1/32 oz., $5.25.**

MALACOIDES. Fine house plant, lilac. **Pkt., 10c; ⅛ oz., $2.00.**

PYRETHRUM—Painted Daisy

SINGLE MIXED. A showy perennial with daisy-like flowers, blooming during May and June. The plants grow 2 feet tall and come in shades of rose, pink, red and white. **Pkt., 10c; ¼ oz., 75c.**

DOUBLE MIXED. This mixture contains many bright showy colors, shading from white to deepest red. The blooms are elegantly doubled. **Pkt., 10c; ⅛ oz., $1.50.**

Trollius

Stokesia

Wallflower

RANUNCULUS

CAMELLIA FLOWERED GIANT DOUBLE MIXED. Pkt., 10c; ⅛ oz., $1.50.

RUDBECKIA—Cone Flower

PURPUREA. (Echinacea.) A handsome variety, producing large, dull rosy purple flowers with a black center. Blooms from July until October; 2 feet. Pkt., 10c; ½ oz., 75c.

SAPONARIA—Rock Soapwort

***OCYMOIDES.** Splendid hardy rock plant, with rose pink flowers during spring and summer; 6 to 9 inches tall. Pkt., 10c; ¼ oz., 25c.

SCABIOSA

Charming perennials for border and cut flower culture.

CAUCASICA. (Lila.) The large lavender blue flowers are borne profusely on fine long stems. The plants are about 2 feet tall. Pkt., 10c; ⅛ oz., 60c.

COLUMBARIA LAVENDER. The large lavender blue flowers are borne on short heavy stems, a splendid improvement upon the older varieties. Pkt., 10c; ⅛ oz., 75c.

COLUMBARIA PINK. The showy large blooms are a bright shade of rich pink. Pkt., 10c; ⅛ oz., 75c.

SHASTA DAISY

Splendid hardy perennial plants, having large white flowers with yellow center, born singly on long stiff, wiry stems; excellent for cutting; profuse bloomers. Pkt., 10c; oz., 75c.

SILENE

SCHAFTA. Dwarf rose purple, June-September; 6 inches; full sun. Pkt., 10c; ¼ oz., 50c.

STATICE—Sea Lavender

Splendid hardy perennials, either for the border or rockery, producing all summer panicles of small flowers, which can be dried and used for winter bouquets; 2 feet.

LATIFOLIA. Large deep-blue flowers. Pkt., 10c; ½ oz., 75c.

STOKESIA—Cornflower Aster

CYANEA. A lovely hardy plant producing an abundance of handsome lavender flowers blooming all summer, 2 feet high. Pkt., 10c; ⅛ oz., 60c.

SWEET WILLIAM—Biennial

DIANTHUS BARBATUS

Sow the seed very early and have vigorous young plants coming into bloom the same season. They may be sown, however, in August to bloom the following spring.

SINGLE MIXED. All shades of white, pink and red. Pkt., 10c; oz., 40c.

DOUBLE MIXED. Very fine; all colors. Pkt., 10c; oz., 75c.

THALICTRUM—Meadow Rue

Very graceful perennial plants with finely cut foliage; excellent for the hardy border.

AQUILEGIFOLIUM. Columbine Meadowrue, 3 feet tall, blooms in June. Pink, White and Purple. Mixed. Pkt., 10c; ¼ oz., 50c.

DIPTEROCARPUM. Rosy purple, with yellow anthers. Pkt., 10c; ¼ oz., 50c.

TRITOMA—Poker Plant

EARLY HYBRID. Massive orange-scarlet flowers, spikes 3 feet tall. Needs winter protection. Pkt., 10c; ¼ oz., 75c.

TROLLIUS (Globe Flower)

Beautiful border and rockery plants, 18 inches, flowering from May to July.

HYBRIDUS. Orange globe. Pkt., 10c; ⅛ oz., $3.00.

VALERIANA (Coccinea)

Very showy red flowered border plant, 2 to 3 feet. Does well in poor soil. Pkt., 10c; oz., 75c.

VERONICA—Speedwell

SPICATA MIXED. Bright blue, pink and white flowers during June. Grows 1½ feet tall. Pkt., 10c; ¼ oz., 75c.

***REPENS.** Lovely deep blue flowers during May and June; 6 inches tall. Pkt., 20c; ⅛ oz., 65c.

VIOLAS OR TUFTED PANSIES

Well-known, free-flowering hardy perennials, easily grown from seed. While flowers are not so large as the regular type of Pansy, the blooms are produced in such an abundance and the flowering season so much longer that they are superior to pansies for some purposes. Seed sown in April produces flowering plants by June and from then on until frost they are a sheet of bloom.

BLUE GEM (Jersey Gem). 1/16 oz., $3.00.

LUTEA SPLENDENS (Yellow). ¼ oz., 75c.

HYBRIDA. Choice mixed. Pkt., 10c; ⅛ oz., $1.00.

VIOLET-ODORATA

This beautiful, sweet-scented hardy perennial can be easily grown from seed, thriving best in a partially shaded, moist situation. Pkt., 10c; ⅛ oz., $1.00.

WALLFLOWER

GIANT GOLIATH. The earliest and best single variety; large flowered, extra dark blood red. Pkt., 10c; ¼ oz., 20c.

SINGLE MIXED. Pkt., 10c; oz., 50c.

BRANCHING TALL. Double mixed. Pkt., 10c; ⅛ oz., $2.00.

Varieties marked * suitable for Rock Gardens.

ROSE BUSHES

DORMANT ROSES

Carried in stock during March, April and May

Prices 25c ea. to 50c ea.

According to Grade

AMERICAN BEAUTY. Cerise-red.

BETTY UPRICHARD. Long, pointed buds; flowers of a delicate salmon-pink, vigorous bushy growth, profuse bloomer.

CHARLES K. DOUGLAS. Scarlet in color and slightly fragrant. A strong grower and one of the best red roses for the garden.

DAME EDITH HELEN. A free flowering sweetly scented rose of clear pink color and very shapely buds.

DBL. WHITE KILLARNEY. Splendid pure white variety.

EDITH NELLIE PERKINS. Buds of rich orange-pink outside and salmon-pink inside of petals; fairly double blooms with a golden underglow.

E. G. HILL. Bright scarlet shading to a deeper red; high centered, very vigorous and free flowering.

ETOILE DE HOLLANDE. Brilliant red flowers of large size, very fragrant, vigorous and healthy grower.

FRAU KRAL DRUSCHKI. White.

GOLDEN OPHELIA. Salmon pink shaded golden yellow.

HADLEY. Velvety crimson.

JOANNA HILL. Long, rich apricot blooms with a suggestion of bronze. Strong grower, beautiful foliage.

K. A. VICTORIA. The standard, double, pure white bedding rose.

LOS ANGELES. One of the finest roses grown; color, luminous flame pink toned with coral and shaded with translucent gold at base of petals; flowers very large and a vigorous grower.

MARGARET McGREDY. Brilliant red petals on hinges of deep gold. Plant upright; seldom out of bloom.

MEVR. G. A. VAN ROSSEM. Golden salmon and light orange. Free flowering.

MISS ROWENA THOM. Blending of brilliant pink mauve and old gold. A vigorous upright grower and a profuse bloomer.

MME. BUTTERFLY. Bright pink shaded gold.

MME. JULES BOUCHE. Medium sized, white flowers, lightly tinted with pink at the center.

MRS. E. P. THOM. Long slender buds, opening into perfectly shaped blooms of lemon-yellow, sweetly scented.

MRS. P. S. DuPONT. Buds are reddish gold, opening into beautiful yellow flowers.

MRS. SAM McGREDY. Large, fairly double bloom of orange-salmon, with a suffusion of gold; vigorous healthy plant.

PRESIDENT HOOVER. A splendid color combination of maroon, orange and gold. Long pointed buds, rigid stems.

RADIANCE PINK. Large, brilliant rose-pink blooms.

RADIANCE RED. A bright rosy red form of Radiance.

REV. F. PAGE ROBERTS. A golden yellow shaded red rose of large size and very fragrant.

ROSLYN. Full golden yellow bloom, deeper in center with orange splashings on back of petals.

SOUV. DE CLAUDIS PERNET. Yellow.

SUNKIST. Brownish orange sport of the well-known Joanna Hill. Flowers even larger.

TALISMAN. A rose noted for its exceptional color. Scarlet orange with rich yellow shadings; strong grower with rich glossy foliage and very free flowering.

VILLE DE PARIS. Pure yellow, somewhat similar to Radiance, stands up well under all weather conditions. Splendid for cutting.

WILLOWMERE. Pink.

CLIMBING ROSES

AMERICAN BEAUTY, Brilliant Carmine.

DR. VAN FLEET, Pale Pink.

PAULS SCARLET, Intense Scarlet.

PRIMROSE. Canary-yellow.

SILVER MOON. White, semi-double, very large with yellow stamens.

POTTED ROSE BUSHES

These roses are ready to bloom when planted out in May, and will give maximum results. They were freshly dug last Fall and potted at once, preserving all their vitality. During the Winter they have been developing in cold frames to be planted, pot and all, in the field during March. Their growth has been natural and they should not be confused with bushes which have been forced for cut flowers all Winter.

75c each—$8.75 per dozen (except as noted).

Dame Edith Helen	Kaiserin Augusta Victoria
Etoile de Hollande	Miss Rowena Thom
President Hoover	Red Radiance
Pink Radiance	Rev. F. Page Roberts
Talisman	Ville de Paris

and other popular varieties.

U. S. PLANT PATENTED NOVELTIES

AMELIA EARHART (U. S. Plant Patent No. 63). Large yellow with blush cream overtone, extremely fragrant, vigorous free flowering habit. **$1.25 each; dozen rate $1.05 each.**

BETTER TIMES (U. S. Plant Patent No. 23). Brilliant cerise profuse flowering habit, foliage leathery, dark green. **$1.25 each; dozen rate $1.05 each.**

CARILLON. (U. S. Plant Patent No. 136.) A bedding rose of great activity; long pointed buds of orange-scarlet contrasting pleasingly with the green sepals. **$1.25 each; dozen rate $1.05 each.**

COUNTESS VANDAL. A sensation of the shows, because of its long pointed bud and its distinctive shading of coppery bronze, a very vigorous grower. **$1.00 each; dozen rate 84c each.**

MATADOR. (Patent applied for.) Large full rose, well formed, scarlet crimson with darker silky sheen on the reverse, very fragrant and vigorous. **$1.50 each; dozen rate $1.25 each.**

NIGRETTE (U. S. Plant Patent No. 87). European novelty **$1.50 each; dozen rate $1.25 each.**

TOKEN (U. S. Plant Patent No. 95). A unique single toned apricot color, free bloomer, upright growth, glossy foliage, disease resistant. **$1.25 each; dozen rate $1.05 each.**

CLIMBING ROSES. 3 or more at dozen rate.

BLAZE. Plant Patent No. 10. The new hardy everblooming scarlet climber, vigorous and free flowering. **$1.00 each; dozen rate 84c each.**

GOLDEN CLIMBER. (U. S. Plant Patent No. 28.) Golden **$1.00 each; dozen rate 84c each.**

NEW DAWN. New ever blooming large flower, fragrant pink climber. The flowers are produced on long stems, early summer until frost. **$1.50 each; dozen rate $1.25 each.**

Gladioli in Mass Planting

JACOBA VAN BEYEREN. Pure deep violet. Flowers well arranged on tall erect stem.

LONGFELLOW. Clear La France pink, tall spike of large wide open flowers.

LOS ANGELES. Shrimp pink with orange-carmine throat. Famous as a "cut and come again" variety, as it will send up numerous side spikes if properly grown.

MARMORA. Massive lavender-gray with purple throat.

MINUET. A beautiful clear light lavender. Considered the finest gladiolus in this color.

MOTHER MACHREE. Lavender, edged salmon-pink.

MR. W. H. PHIPPS. LaFrance pink, overlaid with salmon rose, lighter towards the center, lower petals faintly striped and speckled with ruby. A large flower on strong stem, many open at a time.

MRS. FRANK PENDLETON. Deep rose-pink, shading to pale pink in throat, large bright crimson blotches on lower petals, giving it a striking appearance; tall, vigorous grower; extra cut flower sort.

MRS. LEON DOUGLAS. Tremendously large flowers, many open at a time, very tall, strong stem with several side shoots. Color, begonia rose striped with flame scarlet, lower petal pale lemon, speckled ruby. The whole forming a gigantic bouquet. Considered one of the largest glads in existence.

MRS. P. W. SISSON. Beautiful light creamy pink.

MRS. VAN KONYNENBURG. Best true blue variety, grows five feet tall, stems erect, flowers well placed on stems.

NANCY HANKS. Rich apricot with red tongue.

PAUL PFITZER. Very large deep velvety red.

PEACE. One of the best, pure white with lilac feathering on lower petals; large flowers on long, strong stem, many open at a time; great variety for late blooming.

PERSIA. Deep mahogany-red, almost black.

PICARDY. Rich apricot, pink blooms.

PURPLE GLORY. Deep velvety maroon red with almost black blotches as if burned into petals. Beautifully ruffled and of remarkable color.

SCARLET WONDER. Pure deep scarlet. Large flowers, many open at a time on tall stiff stems.

SOVEREIGN. Deep indigo blue. Large rounded flowers well placed on strong stem.

VIRGINIA. Flaming scarlet; large, massive flowers, many open at a time, making a gorgeous display of dazzling red; good forcer.

GLADIOLI

Plant Manns' Gladioli Bulbs. They are strictly 1½ inch or more in diameter, sound, true to name, and can be absolutely depended upon to produce large, beautiful well-formed blooms.

Cultural Suggestions: Set bulbs 4 inches deep and 6 inches apart, either in rows or massed in beds, borders or among shrubbery. Successive plantings from April to July will bloom from July until frost. They will thrive in any good garden soil, but a sunny location is best. Cultivate frequently and water freely while blooms are forming.

AFLAME. Orange-red of immense size.

AVE MARIA. Light blue with deep purple blotch.

BELINDE. Creamy yellow, very large.

BETTY NUTHALL. Beautiful salmon pink with yellow throat, florets of fine texture and placement. A tall and straight grower.

CAPTAIN BOYNTON. Massive lavender with maroon spot in the throat. A large show flower, tall spike, very choice. Midseason.

CHARLES DICKENS. Beautiful purple violet. A very good grower with large flowers on tall spikes.

CRIMSON GLOW. Rich glowing velvety crimson, shaded deeper in the center; tall, strong grower; flowers well placed; considered the best in its color.

DR. F. E. BENNETT. Peach red, overlaid with flame scarlet, throat speckled ruby and creamy white. Flowers of large size and on strong stem.

GLORIANA. Finest golden salmon with pure yellow throat. Many well opened flowers at a time on straight, strong and tall stems.

GOLDEN DREAM. Pure golden yellow. One of the leading cut-flowers.

Variety	PRICES Each	Doz.	Per 100
Aflame	$0.07	$0.70	$5.00
Ave Maria	.10	1.00	7.50
Belinde	.07	.70	5.00
Betty Nuthall	.05	.50	3.50
Captain Boynton	.05	.50	3.50
Charles Dickens	.06	.65	4.50
Crimson Glow	.04	.40	3.00
Dr. F. E. Bennett	.06	.65	4.50
Gloriana	.05	.50	3.50
Golden Dream	.04	.40	3.00
Jacoba Van Beyeren	.08	.80	6.00
Longfellow	.05	.50	3.50
Los Angeles	.04	.40	3.00
Marmora	.06	.65	4.50
Minuet	.10	1.00	7.50
Mother Machree	.10	1.00	7.50
Mr. W. H. Phipps	.06	.60	4.00
Mrs. Frank Pendleton	.05	.50	3.50
Mrs. Leon Douglas	.05	.50	4.00
Mrs. P. W. Sisson	.06	.60	4.00
Mrs. Van Konynenburg	.07	.70	5.00
Nancy Hanks	.05	.50	3.50
Paul Pfitzer	.08	.80	6.00
Peace	.04	.40	3.00
Persia	.06	.60	4.00
Picardy	.06	.65	4.50
Purple Glory	.07	.65	4.50
Scarlet Wonder	.06	.65	4.50
Sovereign	.07	.70	5.00
Virginia	.05	.50	3.50

GLADIOLUS MIXTURES

MANNS' SPECIAL VARIETY MIXTURE:

30 Bulbs (mixed) 1 of each listed $1.35.
90 Bulbs (mixed) 3 of each listed $3.85.
100 Bulbs, in multiples of 10, your selection at 100 rates.

MANNS' SUPERIOR RAINBOW MIXTURE: Made up of varieties which because of their commercial value and reliable flowering qualities are being produced in such large quantities that low prices are made possible.

25c per doz.; $1.85 per 100

GIANT FLOWERED CANNAS

CITY OF PORTLAND. 3½ ft. pink. Flowers of largest size. A glowing shade of pink. Foliage green. **$1.00 per dozen.**

INDIANA. 6 ft. Very large flowers of a rich, golden orange color. **60c per dozen.**

KING HUMBERT. 4 ft. Leaves are purple-brown over bronze. Crowned with immense heads of velvety orange-scarlet. **60c per dozen.**

MRS. ALFRED F. CONARD. 4 ft. The grandest salmon-pink in existence. **60c per dozen.**

PRESIDENT. 4 ft. The most wonderful green leaved, red flowered canna in cultivation. **75c per dozen.**

YELLOW KING HUMBERT. 4 ft. Green leaves, golden-yellow flowers blotched red. **$1.00 per dozen.**

IRIS GERMANICA

ALCAZAR. Standards, light bluish violet. Falls, deep purple, bronze veined at the throat. Its growth is robust with widely branching flower stalks, bearing large blooms of waxy texture; 4 feet tall.

JEAN D'ARC. A delicate sort of good size and form; white with edges partly checked and scapes heavily suffused in violet.

KING OF IRIS. The standards, a clear lemon color, falls, deep satiny-brown with a broad border of golden yellow.

MOTHER OF PEARL. Pale bluish lavender of exceptional substance and texture; 4 feet.

PARISENSIS. The fine blue standards harmonize well with the deeper blue falls. The flowers are large and are borne very early. The free blooming habit has made it a great favorite.

Any of the above Varieties or Mixed 10c each; $1.00 per doz.

JAPANESE IRIS

Perfectly hardy and excellent for naturalizing, coming into flower about the middle of June. They continue for five or six weeks at which time they are particularly welcome.

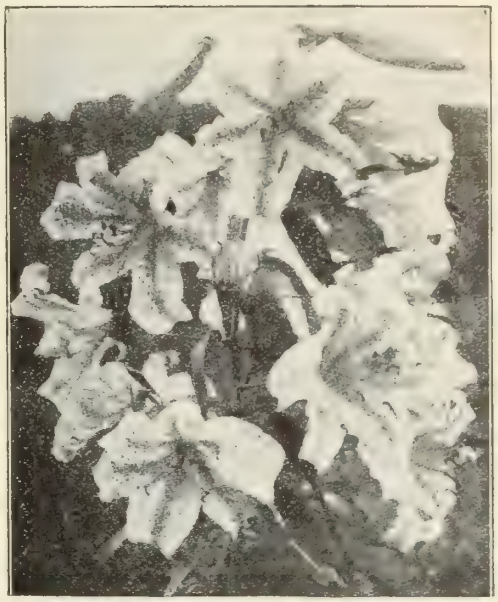
Popular Varieties or Mixed:—$2.25 per doz; $15.00 per 100.

HYACINTHUS CANDICANS

An ornamental mid-summer flowering plant, producing from 20 to 100 large bell shaped flowers of a creamy white color on spikes two to three feet long. **10c each; $1.00 doz.**

Hardy German Iris

HARDY OUTDOOR LILIES



AURATUM (Gold Banded Japanese Lily)

LILIES

	Each	Doz.
Speciosum rubrum. White spotted with red	$ .35	$3.50
Henryi. Orange yellow Speciosum	.30	3.00
Tenuifolium. Bright rich scarlet	.15	1.50
Tigrinum splendens (Single). Red spotted purple black	.20	1.85
Lilium candidum (Madonna Lily)	.10	1.00
Regale. White, shading to yellow in the center with pink tinge on outer edge	.20	1.85

PEONIES

	Each
Baroness Schroeder. Immense white, fragrant	$ .60
Couronne d'Or. White with yellow stamens	.25
Edulis Superba. Clear mauve pink, very early	.25
Felix Crousse. Ruby red, blooms profusely	.25
Festiva Maxima. White, carmine spot on center petal	.25
Mons. Jules Elie. Glossy lilac pink, shading to a deeper rose at the base	.25
Sarah Bernhardt. Midseason. Appleblossom pink with each petal silver tipped	.25

AMARYLLIS

Giant American Hybrids

The most desirable type of Amaryllis, especially beautiful and easily managed in the amateur's window or conservatory, produces from four to six gigantic blooms of perfect form. **35c each; $3.50 per dozen.**

TUBEROUS ROOTED BEGONIAS

Especially adapted to window or conservatory culture. We offer bulbs produced from the best seed strains, largest size 2 inches and up in diameter. Scarlet, pink, yellow. Single or double. **25c each; $2.50 per dozen.**

EXCELSIOR PEARL TUBEROSE

One of the most fragrant and most popular of the summer flowering bulbs. May be started early in hotbeds or pots, or planted in open ground after the first of May. **Extra large size bulbs. 35c per dozen; $2.50 per 100.**

CALADIUM ESCULENTUM OR ELEPHANT'S EAR

Large bulbs, 3 to 4 inches in diameter. **15c each; $1.50 per dozen; medium sized bulbs 5c each; 50c per dozen.** Add postage. **Special price on quantities.**

DAHLIAS

Exhibition, Garden and Cut Flower Varieties

Dahlias do well in almost any kind of soil, but thrive best in a medium loam. The tubers should be planted in a horizontal position, with the sprout up and about four inches below the surface; they should be set three or four feet apart each way, in deeply spaded soil. Mulch with peat moss and allow only one shoot to stand. A good plant food applied just as the buds start to form will increase the size and improve the color of the blooms. If large exhibition blossoms are desired, it is absolutely necessary to disbud. After the frost has killed the flowers, the roots should be removed from the ground, allowed to dry for two or three days, and then stored away in peat moss in a cool, dry, dark place, where frost will not reach them.

KEY. C—Cactus. SC—Semi Cactus. ID—Informal Decorative. FD—Formal Decorative.

AMBASSADOR—(C). A beautiful dahlia greatly admired; strong grower, and free bloomer. Has many gorgeous colors, blending from a soft yellow center to salmon pink tips. **Roots 75c.**

DWIGHT W. MORROW—(ID rated 86). Spectacular gigantic rich red dahlia, admired by all. **Roots $1.00.**

EAGLE ROCK FANTASY—(ID rated 87). Huge mallow pink or violet rose flowers with silver shading. A very desirable recent introduction. **Roots $1.75.**

FORT MONMOUTH—(ID rated 86). Rich claret color, very prolific garden sort and a winner at exhibitions. **Roots 75c.**

JANE COWL—(ID). Massive blooms of bronzy buff and brilliant gold, broad twisted petals, good stem. **Roots 25c.**

JERSEY'S BEACON—(FD). A decided novelty of merit; chinese scarlet with a paler reverse, giving a two-toned effect. An exhibition flower of vigorous growth; excellent stem. **Roots 25c.**

JERSEY'S BEAUTY—(FD). This wonderful dahlia was introduced by W. H. Waite in 1923, and is numbered as one of the favorite varieties. Most delicate cut flower on good stiff stem, of an erosine pink; a wonderful keeper; plant of erect habit and growth. **Roots 25c.**

KATHLEEN NORRIS—(ID rated 87). The finest true rose pink yet introduced. **Roots 75c.**

KEMP'S VIOLET WONDER—(ID rated 85). Violet color with undertone of Royal Purple lightening to a faint bluish violet at the tips of the petals. **Roots 75c.**

OMAR KHAYYAM—(FD). One of the best exhibition varieties but equally valuable for garden and cut flower display. Color a rich Chinese red at the base of the petals shading to bright orange and tipped lighter. **Roots 75c.**

MONMOUTH CHAMPION—(FD). Brilliant orange flame color immense size. Popular prize winner. **Roots 75c.**

MARMION—(ID). One of the finest exhibition varieties. **Roots 75c.**

MRS. I. De Ver WARNER—(FD). Vigorous grower on splendid stems; true to type; fine form, orchid lavender. **Roots 25c.**

TREASURE ISLAND—(FD rated 88). Bright orange yellow with rose and gold shading. One of the autumn shade varieties. **Roots 85c.**

PLEASE NOTE

We can also offer many of the older varieties, once leaders and still very beautiful. **Roots 25c to 50c.**

EVERGREENS

These Evergreens have been grown at our proving grounds and are priced low for such high quality material. All are burlaped and balled for safe transplanting.

ARBORVITAE (Thuja)

AMERICAN. A quick compact, pyramidal, grower for house foundation groups. 2 to 3 ft. **$1.35**; 3 to 4 ft. **$1.75.**

CHINESE. Very compact foliage column shaped, excellent for entrance or group plantings. 3 to 4 ft. **$1.75**; 4 to 5 ft. **$2.00.**

PYRAMIDAL. A perfect pyramid, densely branched, very slow grower that needs no shearing. 2 to 3 ft. **$1.50**; 3 to 4 ft. **$2.25.**

GLOBE. A charming little evergreen that is an almost perfect ball, it seldom reaches over 3½ ft. 15 to 20 inches. **$1.00.**

GOLDEN GEO. PEABODY. A clear yellow color in the springtime, very compact habit of growth. The flattened leaf clusters face outward edgewise, presenting a beautiful surface of vertical fluted lines. 20 to 30 inches **$1.50.**

JUNIPERS

IRISH—(Communis Hibernica). Symmetrical spiral grower, silvery green foliage. Makes perfect specimen without pruning. 3 to 4 ft. **$1.50.**

GREEK—(Excelsa Stricta). It assumes a broad compact pyramid, of a delightful bluish green silver tipped foliage, very slow growing. 20 to 24 inches. **90c each.**

PFITZERS. A graceful broad evergreen with sweeping fronds of greenish-blue foliage. It thrives under almost any condition. 2 to 3 ft. spread **$1.75**; 3 to 4 ft. **$3.00.**

ANDORA—(Communis Depressa). A low spreading Juniper. It seldom raises its branches over 18 inches off the ground, the extremities curve upward. Ideal for hillside planting. Spread 2 to 3 ft. **$1.75.**

PINES

SCOTCH. Most of these species make a vigorous growth, when young the branches form a picturesque pyramidal tree. 3 to 4 ft. **$1.25.**

MUGHO—(Montana Mughus). The tree is broader than it is high forming a dark, dome-shaped bush. In spring the bright colored new shoots like tiny candles adorn them and provide a splendid contrast to other evergreens. 2 to 3 ft. **$1.85.**

RETINOSPORAS (Chamaecyparis)

These belong to the Japanese Cypress family and embrace some of the most beautiful evergreens in cultivation.

OBTUSA. A neat pyramidal tree which develops quite rapidly into a symmetrical pyramid. The foliage is of dark green color above and silvery beneath. Specimens 4 to 4½ ft. **$3.25 each.**

PISIFERA. The graceful, drooping branches are covered with soft feathery glossy-green foliage. Very distinctive. 4 ft. and over. **$2.50.**

PLUMOSA. Useful for hedges and formal work. Is of a tall pyramidal shape with firm green foliage. 3 to 4 ft. **$1.75.**

SQUARROSA—(Veitch's Moss Cypress). The distinctive silvery-blue foliage makes it very desirable as a lawn specimen or for color contrast in groups. Pyramidal in habit very dense in branch structure. 2½ to 3 ft. **$2.75**; 4 ft. and over **$3.25.**

YEWS—TAXUS

These Yews are among the few evergreens which thrive in shady places and cold northern exposures.

DWARF JAPANESE—(Cuspidata Nana). A dwarf compact evergreen keeps its rich green foliage throughout the winter, very slow grower. 15 to 20 inches. **$1.25.**

TAXUS CUSPIDATA. This is an upright Yew of tree form with strong lateral branches. Can be trimmed to a compact pyramidal shape to take the place of boxwood. 2 to 3 ft. **$1.75.**

SPRUCE—PICEA

NORWAY—(Picea Excelsa). A tall picturesque, hardy, rapid growing tree, graceful in all its lines. Used extensively as specimens. Some of the oldest hedges in the United States are of Norway Spruce. 2 to 3 ft. **$1.00.**

COLORADO BLUE—(Picea Pungens Glanca). It has steel blue foliage glistening throughout the summer and winter. Seeds sown from the very best strain produces but a very small percentage of blue specimens, which accounts for the high price. 20 to 30 inches. **$2.75.**

COLORADO GREEN SPRUCE. One of the finest of all specimen evergreens. By nature it is a symmetrical dense and shapely grower, making a handsome pyramidal tree, very hardy. 20 to 30 inches. **$1.25.**

KOSTER BLUE SPRUCE. This is a grafted variety and undoubtedly is the bluest of all evergreens. Rather high in price but very valuable as a specimen on the lawn. 3 year grafts **$3.50**; 24 to 30 inches **$4.00.**

AZALEAS

These beautiful and popular evergreens are particularly attractive for woodland edges, or shaded spots on lawns. They thrive only in acid soil but their beauty and usefulness justifies the little extra effort of applying aluminum sulphate and humus.

ARBORESCENS. Broad, dense plant; flowers white, pink outside, **9 to 12 in. clumps $1.25 each.**

AMONEA. Late flowering rosy-crimson, **8 to 10 in. heavy, $1.25 each.**

CALENDULACCA—(Flame Azalea). The most showy Azalea; bears flame-red or orange-yellow flowers before the leaves appear, **9 to 15 in. clumps $1.50 each.**

HINODEGIRI. Beautiful brilliant red, **8 to 10 in. heavy $1.50 each.**

MOLLIS—(Chinese Azalea). Thrives in sunny positions, bearing masses of flowers in various shades of red, yellow and orange, **18 to 24 in. $4.50 each.**

NUDIFLORA — (Pinxter Bloom). Handsome, early, free flowering, deep pink species, **6 to 12 in. clumps $1.00 each.**

HYBRID EVERGREEN AZALEAS

CARMEN. Carmine pink.

CLEOPATRA. Light lilac rose.

FEDORA. Deep salmon pink, extra strong grower.

OTHELLO. Hinodegiri, brick-red, very strong grower.

12 to 18 inch, $2.75; 18 to 24 inch, $5.00; 24 to 30 inch, $7.00.

HEDGE PLANTS

BARBERRY

THUNBERGI. Popular for mixing in the shrubbery border, as single specimens, or for planting in clumps on the lawn, as well as for foundation plantings and for hedges. **15 to 18 in. selected 35c doz.; transplanted 65c doz., 18 to 24 in. $1.00 doz.**

NEW TRUEHEDGE COLUMNBERRY (U. S. Plant Patent No. 110). Erect compact variety of Japanese Barberry far superior to the common type in foliage, color and habit of growth. Somewhat resembles boxwood; requires practically no trimming, extremely hardy and immune from rust. Plant 8 to 12 in. apart. **9 to 12 in. 40c each; $3.00 per 10; $25.00 per 100; 15 to 18 in. 60c each; $5.00 per 10; $45.00 per 100.**

CALIFORNINA PRIVET. 12 to 18 in. $2.75 per 100; 18 to 24 in. $3.25 per 100. Gold Seal Brand 50c dozen.

RHODODENDRONS

CAROLINIANUM—(Carolina Rhododendrons). Grows 4 to 6 ft. tall, blooms profusely, very early, pale to deep pink. **Recommend for exposed situations. 12 to 18 inch heavy clumps B. & B. $2.50 each.**

CATAWBIENSE. The most showy Rhododendron, grows 4 to 6 ft.; hardy, vigorous and free-flowering, producing a gorgeous display of lilac purple blooms in May and June. **12 to 18 inch heavy transplanted clumps B. & B. $2.50 each.**

MAXIMUM. The Great Laurel of the Mountain, attains a height and width of 10 ft. Flowers white to pale pink blooms in June and July. Most beautiful foliage of all Rhododendrons. **Very suitable for bold mass plantings. 12 to 18 inch transplanted clumps B. & B. $2.50 each.**

HARDY HYBRID RHODODENDRONS

These hybrids are noted for the beauty, richness and large size of their flowers, in various colors. They deserve a place in any garden and add greatly to the general appearance. The plants priced below are hardy, bushy plants, well set with flower buds, which will give immediate results.

AMERICA. Deep red.

DR. H. C. DRESSULHUYS. Analine red, strong grower.

MRS. C. S. SARGENT. Deep pink.

LEE'S DARK PURPLE. Purple.

PRESIDENT LINCOLN. Lilac pink.

ROSEUM ELEGANS. Clear rose.

Two-year grafts 12 inch, $2.00 each; 12 to 18 inch, $4.50 each; 18 to 24 inch, $7.00.

(Two-year grafts have only occasional flower buds.)

FLOWERING TREES

PINK FLOWERING DOGWOOD—(Cornus Floida Rubra). Beautiful rose pink flowering tree making a lovely contrast with the more common white variety. 12 to 18 in. **50c each,** 18 to 24 in. **$1.25;** also well branched specimens, B. & B. 3 to 4 ft. **$2.25;** 5 to 6 ft. **$4.50;** 6 to 7 ft. **$6.75.**

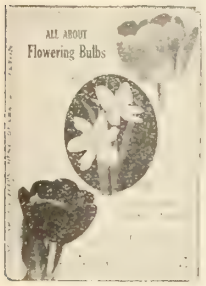
CREPE MYRTLE. Lovely summer flowering shrub. Needs winter protection if to be grown into tree form, but so beautiful it is well worth the effort. It is in strong demand for specimen plantings. Strong bushy plants 2 ft. **$1.50 each.**

JAPANESE FLOWERING CHERRIES. Double (30 ft.). Kofugen, pink; Kwanzan, deep pink; Mt. Fugi, pure white; Naden pink 4 to 5 ft. **$3.00 each; collection, 4 varieties $10.00.**

BECHTEL'S FLOWERING CRAB. Double pink (12 ft. to 16 ft.). 4 to 5 ft. **$1.50 each.**

MAGNOLIA TRIPETALA (30 ft.). 2 to 3 ft. **$1.35;** Glanca, Sweet Bay (20 ft.) 5 to 6 ft. B. & B. **$6.00.**

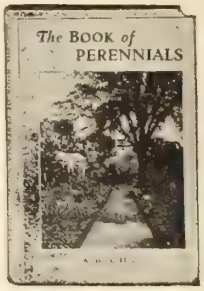
PERENNIALS — Call at our store during April and May for large, vigorous, growing plants in all popular varieties.



GARDEN BOOKS

1001 Garden Questions Answered

By A. C. Hottes. For the amateur gardener who wishes some information on every phase of gardening on his own place. Discusses flowers, fruits, vegetables, pruning, planting, fertilizers, diseases, pests, propagation, soil, lawns, paths, trees, shrubs, etc. Cloth, $2.15, postpaid.



THE BOOK OF ANNUALS

By A. C. Hottes. Complete information on over 100 genera of annual plants, everlastings and vines. Care, culture, diseases, etc. 182 pages, 155 illustrations. Cloth, $1.50, postpaid.

ALL ABOUT FLOWERING BULBS

By T. A. Weston. Complete information on spring flowering, tender flowering and summer flowering bulbs and roots. 186 pages, 8 color plates and 68 halftones. Cloth, postpaid, $2.00.

FLOWERS OF THE WILD

By F. C. Pellett. Covers most of the common wild flowers suited for naturalization in the Northeastern States and the best of them from the West. 168 pages, 4 color plates and 104 halftones. Cloth, $1.00, postpaid.

GARDEN GUIDE

Each subject written by an expert in that line. Discusses all phases of gardening pertaining to the owner of a moderate-sized home. 576 pages, 300 illustrations. Cloth, $2.00, postpaid.

THE BOOK OF PERENNIALS

By A. C. Hottes. Complete information on over 140 genera. Discusses care, culture, propagation, fertilizers, diseases, etc. Gives pronunciation under each genera. 280 pages, 103 illustrations, numerous tables. Cloth, $2.00, postpaid.

PRACTICAL LANDSCAPE GARDENING

By R. B. Cridland. Especially written for the home owner of moderate means. Numerous planting plans, keys and illustrations. 282 pages, 260 illustrations. Cloth, $2.65, postpaid.

ROCK GARDEN PRIMER

By A. Thornton. For the amateur who wishes practical information on every minute point in the construction of a rock garden. 152 pages, 4 color plates, 70 illustrations. Imitation leather, $2.00, postpaid.

THE BOOK OF SHRUBS

By A. C. Hottes. Covers from description to complete care and culture of all the common and some uncommon deciduous shrubs and broad-leaved evergreens. Exceptionally complete. 448 pages, 187 illustrations. Cloth, $3.15, postpaid.

PRACTICAL VEGETABLE CULTURE

By A. E. Wilkinson. For everyone wishing to grow vegetables for home consumption or profit. 308 pages, 135 illustrations. Cloth, $2.00, postpaid.

WATER GARDENS AND GOLDFISH

By R. V. Sawyer and E. H. Perkins. Two closely related subjects presented under the same cover—for those wishing a small tub-pool to the large formal pool. Cloth, $2.00, postpaid.

THE GARDENER, by L. H. Bailey. You get full advantage of Dr. Bailey's unequalled knowledge and experience in this book. It tells how to grow flowers, vegetables, and fruits from the time of planting through to maturity. Special articles on different types of gardening. Information that is easy to find and simple to use. 116 illustrations, 260 pages. $2.00

AROUND THE YEAR IN THE GARDEN, by F. F. Rockwell. Because the time when you do your garden work is so important, you need a regular schedule. This book gives you complete information on every garden problem, outlined week by week, and written by a practical gardener. 88 illustrations, 350 pages. $2.50

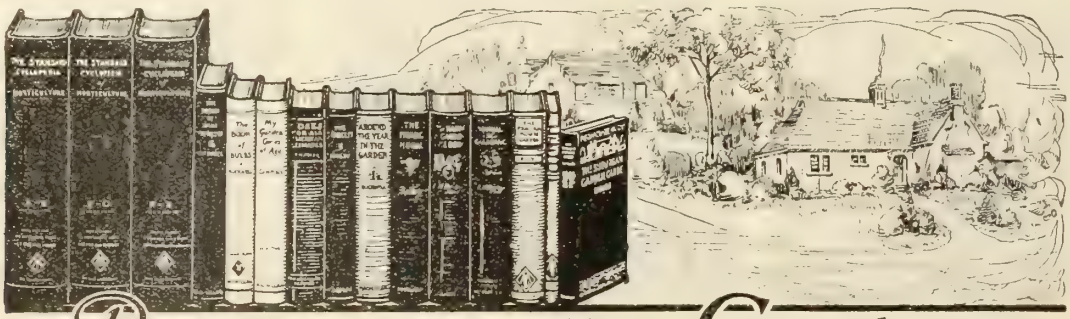
THE STANDARD CYCLOPEDIA OF HORTICULTURE, edited by L. H. Bailey. This is the one universal and invaluable authority on every horticultural question. Makes a compact but thorough presentation of the kinds, characteristics and methods of cultivation of the plants grown in the United States and Canada for ornament, for fancy, for fruit, and for vegetables. Formerly in 6 volumes, but now in three at about half the original price. 5,000 illustrations, 3,637 pages, 3 volumes, fabrikoid binding. $15.00

HOME FLOWER GROWING, by E. C. Volz. A real flower garden encyclopedia! It will teach you how to propagate and cultivate your plants, how to care for, fertilize, and maintain them. It tells how and when and where to grow flowers; what different kinds look like; how to plan indoor, outdoor, rock, and water gardens; how to prepare exhibits for a flower show; how to organize a garden club. 151 illustrations, 364 pages. $3.50

GARDEN MAINTENANCE, by Ortloff and Raymore. How to prune, fertilize, spray, and care for flowers, trees, shrubs, and lawns. This is a book written for the home owner who already has a lawn and garden space; it does not presuppose a new garden or the complete rearrangement of existing plantings. $2.50

HOW TO GROW ROSES, by Pyle, McFarland, and Stevens. Makes every step in the culture and care of roses so clear that any grower can understand it and succeed with them. A completely re-written edition of America's most popular rose book. 211 pages, 138 illustrations, including 45 varieties illustrated in color. $2.00

Dahlias, by F. F. Rockwell	1.25
The Outdoor Living Room, by Ramsey & Lawrence	2.50
Gladiolus, by F. F. Rockwell	1.25
Perennial Gardens, by H. S. Ortloff	1.25
Adventures In A Suburban Garden, by L. B. Wilder	2.00
Roses	1.25
The Book Of Bulbs, by Rockwell	2.00



Books for better Gardens

SPRAY GUIDE

HOW TO GUARD YOUR FLOWER AND VEGETABLE GARDEN

INSECT OR DISEASE	DESCRIPTION	MATERIAL TO USE (See List)	WHEN TO APPLY
Anthracnose	A common disease recognizable from dusky white spots on stems with brown spot on leaves.	**B—Q**	Make first application when growth starts in spring. Repeat weekly until plants start blooming.
Ants	Sweet or grease eating.	**Antrol**	When ants appear.
Aphis	Small green, red or black lice feeding on the tender terminal growth of many plants.	**C—E—W—X**	When pests first appear. Wet insects thoroughly. Repeat as necessary.
Asparagus Beetles	Olive colored, both adults and grub like larvae.	**A—E—N—S—X**	When grubs first appear, preferably when plants are wet with dew.
Bag Worm	Builds ½-inch to 2-inch tapering bag-web.	**A—M—P—X**	When insects first appear or when evidence of feeding is observed. Repeat as needed.
Black Rot	(Grapes) Fungus disease. Shows first as small white spots, later surrounded by brown ring.	**B—F—G—L—Q**	When leaf buds first open. When shoots are 10 to 15 inches long. Just after blossoms fall.
Blights	Bacterial disease that attacks young shoots and leaves, causing brown or black spots and sudden wilting.	**B—F—Q**	Make first application when growth starts in spring. Repeat weekly until plants start blooming.
Brown Canker	Disease which develops small purple spots on stems and leaves of roses, later turning to light center with purple margin.	**B—F—Q**	As above.
Cabbage Looper **Cabbage Worm**	Pale green-white, striped caterpillar. Doubles or loops as it crawls.	**A—E—N—S—X**	When larvae first appear.
Caterpillars	Wooly or naked. Feed on leaves.	**A—E—M—P—S—X**	When insects first appear or when evidence is observed. Repeat as needed.
Celery Leaf Tier	Pale green or green striped caterpillars.	**A—E—P—X**	When first appears.
Corn Earworm	Green worm which eats into ears of corn.	**A—M—P—S**	Apply to silk when it first shows through the tips of each ear. Repeat two or three times within week.
Cucumber Beetles	Yellow and black striped.	**A—E—N—S—X**	When vines begin to run. Repeat at frequent intervals.
Currant Worm	Green leaf-devouring worm.	**A—E—P—S—W—X**	When pests appear.
Cut Worms	Destroy plants by cutting stems.	**Snarol**	When first appear.
Damping Off	Causes plants to suddenly wilt as though rotted at the ground level.	**Cuprocide** **Semesan** **Formaldehyde**	Treat seed or soil.
Downy Mildew	White, downy mold on pods of lima bean, or under side of melon leaves.	**B—F—S**	At weekly intervals.
Grape Berry Moth	Lays eggs from which small worm develops in fruit.	**E—S**	Just after blossoms fall. Repeat at monthly intervals until July.
Grapevine Flea Beetle	Dark brown larvae.		
Grape Root Worm	Grayish brown beetles.		
Horn (Tomato) Worms	Large green worms.	**A—E—N**	When bugs or worms first appear.
Leaf Beetles	Yellow beetles with twelve spots on wings.	**A—E—N—S—X**	When pests first appear. Repeat at weekly intervals.
Leaf Hoppers	Small greenish insects that suck plant juices.	**C—E—N—X**	When pests first appear. Repeat as necessary.
Leaf Spot	Fungus disease causing brown spots on leaves.	**B—F—Q**	Repeat at intervals.
Mealy Bug	White, cottony appearance.	**E**	Every few days until under control.
Mexican Bean Beetles	Copper-colored beetles with eight black spots. Cream-colored larvae, which also devour leaves.	**D—E—M—N—S**	When pests first appear.
Potato Bug or Blister Beetles	Gray, black or striped beetles up to ¾ inch long.	**A—P—X**	Spray or dust plants as soon as they break through and every ten days thereafter.
Powdery Mildew	White growth on leaves.	**B—F—Q**	When white growth makes its appearance.
Red Spiders	Small mites that feed on foliage, causing it to assume a rusty appearance.	**E—T**	When pests first appear; on strawberry use Strawberry Dust (85-15).
Rose Beetle	Long-legged clay-colored beetles on roses and peonies.	**A—E—S—X**	When pests first appear. Repeat at weekly intervals.
Rust	Orange-colored pustules (fungus) in streaks or patches on leaves or stems.	**B—Q—V**	When first appears, or early and weekly as a preventative.
Scab Spot	Fungus disease causing black spots on leaves.	**B—F—Q**	Begin when leaves are size of mouse ears and repeat every ten days or two weeks.
Scale	Attacks bark of tree.	**L—S**	As late dormant spray.
Scurfy Scale	Gray, pear-shaped scale.	**O**	When first appears.
Thrips	Tiny winged or wingless insects that rasp leaves and suck juices from plants.	**C—E—W—X**	When pests first appear. Repeat as necessary.
Tussock Moth	Caterpillar 1½ inches long. Red head. Has tufts of yellow, red, black and white hairs.	**A—E—P**	When insects first appear or when evidence is observed. Repeat as needed.
White Flies	Small whitish flies. In larval stage, tiny, scale-like, greenish objects.	**E—O**	When pests first appear. Repeat as necessary.

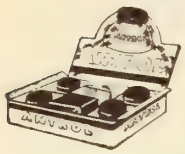
LIST OF MATERIALS INDICATED IN ABOVE CHART

A—Arsenate of Lead.
B—Bordeaux.
C—Black Leaf 40.
D—20-20-60 Dust.
E—*Evergreen, Red Arrow and Rotecide.
F—Fungtrogen.
G—Grape Dust.
L—Lime and Sulphur Solution.
M—Magnesium Arsenate.
N—*Rotenone Dust.
O—*Fish Oil Soap.
P—Paris Green.
Q—Sulfocide.
R—Scalecide.
S—*Slug Shot.
T—Selocide.
V—Volck.
W—Wilson's O. K. Spray.
X—Nicotine-Pyrox.

Materials marked (*) are non-poisonous when used as directed. Pyrethrum and Rotenone base materials such as Evergreen, Red Arrow and Rotecide are **contact** sprays and must strike the insects to be effective.

DUSTING AND SPRAYING MATERIALS

"READY FILLED" ANTROL SET



Consists of four patented glass feeders filled with regular Antrol Syrup, ready for use. Set 40c.

Individual Ready Filled Feeders, 10c each. Not Mailable.

ANTROL DESTROYS ANTS IN THEIR NESTS

New Method "Gets" Them at Their Source—Safe, Permanent, Effective

The Antrol system is adapted to any size house or garden, composed of small glass containers and a special formula of syrup. The ants smell the syrup, eat it and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed!

Prices—Antrol sets containing 4 containers and 1 4-ounce bottle of syrup, 75c.; Antrol extra containers (each), 10c; Antrol syrup, 4-ounce bottles, 35c; pints, 85c.

ARSENATE OF LEAD

For destroying leaf-eating insects, not harmful to the foliage greatly adhesive. Powdered arsenate of lead is more economical than other forms.

Prices—Powder, 1 lb., 20c; 4 lbs., 65c; 48-lb. pkg., 14c lb.

ARSENITE OF ZINC

Kills quicker than Arsenate of Lead, adhesive and less liable to burn foliage than Paris Green. Excellent for potatoes. **Lb., 25c; 4 lbs., 85c; 48-lb. pkg., 18c lb.**

BARIUM FLUOSILICATE

Highly recommended by the University of Tennessee Experimental Station.

Practically non-poisonous, can be either sprayed or dusted.

For Spraying 1 pound to 50 gallons.

For Dusting 6 pounds per acre.

1 lb. 25c; 100-lb. drum $20.00.

BORDEAUX-ARSENATE OF LEAD

3 to 7 pounds to 50 gallons of water.

To kill leaf-eating insects and control fungous diseases; a double purpose spray in one application. **Lb., 25c; 4 lbs., 85c; 100 lbs., $13.50.**

BORDEAUX

(12½ Per Cent Metallic Copper)

Use 8 pounds to 50 gallons of water.

For preventing many fungus growths, blights etc. May be either sprayed or dusted. **Powder, 1 lb., 20c; 4 lbs., 65c; 48-lb. pkg., 15c lb.**

BLACK LEAF 40

Kills Aphis, Thrips, Leaf Hoppers and

other insects on garden, farm and orchard crops by contact and fumes—an advantage not possessed by non-volatile, non-poisonous spray materials.

Also Kills Poultry Lice . . .

Merely paint tops of perches with "Black Leaf 40." Body heat from roosting birds creates fumes which penetrate feathers and kill lice and feather mites.

Oz., 35c; 5 ozs., $1.00; 1 lb., $2.25; 2 lbs., $3.50; 5 lbs., $5.85; 10 lbs., $10.60.

CALCIUM ARSENATE

Lb., 15c; 4 lbs., 50c; 48-lb. pkg., 11c lb.

CARBOLA

Carbola applied to the walls, ceilings, partitions, nests, etc., of your poultry houses will help to prevent contagious diseases among your flock. It will aid in keeping your fowls free from profit-destroying ravages of lice and mites.

5 lbs., 60c; 10 lbs., $1.00; 50 lbs., $3.50.

CARBOLINEUM—(America)

Red mite killer and wood preserver. **Gal., $1.15; 5 gal., $5.00; 30 gal., $27.00.**

CARBON DI-SULPHIDE

Specified by U. S. Dept. of Agriculture for treatment of soils to destroy grubs of the Japanese Beetle.

Also used for control of insects in grain.

Lb., 35c; 5 lbs., $1.25; 100 lbs., $11.00. Plus deposit on Drum.

CORONA COPPERCARB

Grow clean wheat free from bunt or stinking smut and receive top prices for your crop. Corona Coppercarb is a dust recommended by experimental stations to be applied dry to seed wheat any time before sowing. Use 2½ to 3 ounces per bushel of wheat. **5 lbs., 75c.**

CUPROCIDE *will* Save your Seeds

Extensive plantings by Cornell Experiment Station at Geneva, N. Y., positively prove increased yields of Beets, Cantaloupes, Cucumbers, Egg Plant, Peas, Peppers, Spinach, Squash and Tomatoes when seed is treated with Cuprocide. Use 4 oz. to 2½ lbs. per 100 lbs. of seed. (See Chart.) **4 oz., 30c; 1 lb., 80c; 5 lbs., $3.50.**

CYANOGAS UNIVERSAL PEST DESTROYER

A—To kill ants, rats, moles, fleas, bed bugs, moths, bats, grape mealy bugs, melon Aphis. **½-lb. tin, 45c; 1 lb., 75c; 5 lbs., $3.00.**

G—For greenhouse, bulb, grain, soil, household, warehouse fumigations. **1 lb., 75c; 5 lbs., $3.00; 25 lbs., $10.00.**

DAWG-GONE

Protect that evergreen. Keep dogs away. Remove cap and hang in lower branches of trees at points of approach. **35c tube, 3 for $1.00.**

20—20—60 DUST

Arsenate—Copper—Lime

$7.00 per 100 lbs.

DOW'S MAGNESIUM ARSENATE

Magnesium Arsenate (pure) 2-lb. pkg., 60c; 100-lb. drum, $22.00.

Magnesium Arsenate Dust Mixture, 4-lb. pkg., 60c; 100-lb. drum, $12.00.

DU BAY

SEED DISINFECTANTS

These effective seed disinfectants are sold by the Bayer-Semesan Company, a consolidation of E. I. du Pont de Nemours & Company, Inc., and The Bayer Company, Inc. They comprise the following products:

SEMESAN—For vegetable and flower seeds. One ounce to 15 to 30 lbs. seed. **2 oz., 35c; lb., $2.25; 5 lbs., $9.90.**

SEMESAN, JR.—For corn. 2 ounces to 1 bushel corn. **4 oz., 35c; 1 lb., $1.00; 5 lbs., $4.75.**

SEMESAN BEL—For potatoes. 1 lb. to 60-80 bu. potatoes. **4 oz., 45c; 1 lb., $1.50; 5 lbs., $6.75.**

CERESAN—For grains. 2 to 3 ozs. for 1 bu. seed. **1 lb., 70c; 5 lbs., $3.00.**

NEW CERESAN—For wheat. ½ oz. for 1 bu. seed. **Lb., 70c; 5 lbs., $3.00.**

DUSTING AND SPRAYING MATERIALS (Continued)

NEW EVER GREEN SPRAY

A NEW SIMPLE WAY TO KILL GARDEN INSECTS

No complicated instructions. Simply buy New Ever Green Spray, mix with water—and spray. This perfected pyrethrum spray kills both chewing and sucking insects. Harmless to man, plants and animals.

1-oz. bottles, 35c; 6-oz. bottles, $1.00; 16-oz. bottles, $2.00; 1-gal. bottles, $11.00; 5-gal. bottles, $45.00.

FREE—Round flower bowl made of crystal clear blown glass with each one ounce size bottle only.

FISH OIL SOAP

(Do not use with lime or arsenical sprays)

Keeps trees, plants and vines clean and healthy, effectively controlling sucking insects and many forms of scale. **Price, 1 lb., 30c; 5 lbs., $1.25; 25 lbs., $2.50; 100 lbs., $8.50. Liquid, qt., 50c; gal., $1.50.**

FORMALDEHYDE

Extensively used in the preparation of potatoes for seed, as a preventative against potato scab and to destroy other germs on the seed. Will also control some forms of grain smut. For potatoes a solution of 1 pint to 15 or 20 gallons of water is made and cut pieces are soaked for 2 hours. One to two gallons of this will be sufficient for 1 bushel of seed. **Pt., 45c.**

FORMACIDE FORMALDEHYDE DUST

Is a seed and soil treating compound which controls seed borne diseases and when applied to the soil controls "damping off" and other root rots of vegetable and flower seedlings. Usually applied 1 lb. per 10 sq. ft. **1 lb., 75c; 5 lb. can, $2.00.**

FUNGTROGEN

An effective and scientific preventive and remedy for mildew, black spot and many fungus diseases of Roses and other plants. Dilute one part to 60 parts water. **½ pt., 75c; pint, $1.25.**

GRAPE DUST

A readily diffusible, light weight powder fungicide, very efficient in destroying mildews and preventing blights. **5 lbs., $1.25.**

KAY-SO

A combined adhesive and spreader, making spray materials more economical and effective, inexpensive. Use 1 pound to each 100 gallons of spray. **2-lb. pkg., 35c; 10-lb. pkg., $1.60.**

LEMON OIL

Soluble in water; will destroy Aphis, Rust, Scale, and Bugs on Palms, Ferns, Rose Bushes, etc. Highly recommended as a wash for dogs and other animals, destroying lice and relieving mange. **½ pt., 30c; 1 pt., 50c.; 1 qt., 85c.**

LIME AND SULPHUR SOLUTION

The popular spray material for dormant spraying against scale and as a Summer spray against certain fungus diseases.

1 qt., 40c; 1 gal., 75c; 5 gal., $2.75; 50 gal., 14c per gal.

DRY LIME AND SULPHUR

Dormant Season: 12 lbs. to 50 gallons.
Growing Season: 3 lbs. to 50 gallons.

Just as effective as liquid but more economical because of the absence of water. Dissolves readily in cold water and complies with Government specifications. **1 lb., 25c; 12½ lbs., $1.50; 200 lbs., $20.00.**

NICO-FUMELIQUID

Very powerful tobacco extract. Soluble in water. Guaranteed 40 per cent nicotine.

1-lb. tin, $2.25; 4 lbs., $5.75; 8 lbs., $10.00.

NICO-FUME

This is the strongest tobacco paper on the market. Does not injure blooms and furnishes the easiest method of fumigation ever devised.

Tin box of 24 sheets, $1.25; 144 sheets, $4.50; 288 sheets, $8.00.

"NICO-FUME" POWDER PRESSURE-FUMIGATOR

Improved quality; burns under pressure in special container; more effective and more economical than old methods. Use at approximate rate of 1 lb. per 20,000 to 30,000 cu. ft. of air space. **1 lb. size, 75c ea.; 6 for $3.75; 12 for $7.00; ½ lb. size, 45c ea.; 6 for $2.40; 12 for $4.20.**

NICOTINE DUST

Extremely valuable for combating pea lice, aphis, etc.

100-lb. drum, $16.00.

OIL EMULSION

Contains 83 per cent of refined petroleum oil. Kills scale and many other over-wintering insects on trees; is safe and easier to use. A dormant spray which penetrates into all cracks and crevices, thus insuring better coverage. 50 gallon steel drum. **83%—mix 1 to 25—23c. gallon; 66 2-3%—mix 1 to 20—16½c gallon. (Plus $1.50 deposit on drum, returnable.)**

PARIS GREEN

A poisonous, insoluble powder similar to arsenic in its effects; used extensively against potato bugs, worms and caterpillars, etc.

¼ lb., 15c; 1 lb., 50c; 5 lbs., $2.25.

PURE PARA-DICHLOROBENZENE

For Peach Borer Control

Very powerful and effective remedy just coming into general use as a result of the experiments of the Department of Entomology. Should be applied September 1st to October 10th, according to latitude. Some growers prefer to make two applications, the first being in the month of June. One pound is sufficient for 10 to 30 trees, according to size. It is not advisable to treat trees under 4 years of age with Para-Dichlorobenzene, and apple trees should never be treated.

1 lb., 40c; 5 lbs., per lb., 35c; 10 lbs., per lb., 30c; 25 lbs., per lb., 22c; 100 lbs., per lb., 20c.

Pyrox kills bugs —*prevents* blights

ALL you have to do to keep your farm crops free from leaf-chewing insects and fungus diseases is this: Mix Pyrox with water and spray. No need to waste time and effort mixing Bordeaux and arsenicals.

We recommend Pyrox because it will not clog the smallest nozzle. It comes out a fine mist and covers the foliage completely, sticking to the leaves even through the hardest rains. Insects die. Blight is prevented. Your farm has a chance to show what it really can do for you! There is a size of Pyrox to suit every need!

Nicotine Pyrox

If you have a garden patch, you will want a jar of the new Nicotine Pyrox—Standard Pyrox treated with Nicotine. It not only kills leaf-chewing insects, prevents blight and other diseases, as Standard Pyrox does, but it also kills *sucking insects*, such as aphis, thrips and leaf-hoppers. Standard Pyrox, of course, is designed for most commercial crops, but in the garden, where sucking insects do so much damage, you will want Nicotine Pyrox.

Just mix **Pyrox** with water—and spray.

	Without Nicotine	With Nicotine
1 lb.	...	$ .49
5 lb.	...	1.75
10 lb.	...	3.00
25 lb.	$5.00	5.65
50 lb.	7.25	8.55
100 lb.	12.50	15.00
300 lb.	30.00	37.50

DUSTING AND SPRAYING MATERIALS (Continued)

Dust with *Pomo-Green*

A complete dust that will control black-spot, mildew, and insects on roses and all flowers in general.

1 lb., 50c; 5 lbs., $1.75.

With Nicotine—1 lb., 75c; 5 lbs., $3.00.

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1 oz. makes 8 gal.

Economical and efficient contact spray, non-poisonous, will not injure blossoms, foliage of fruit; positive death to all types of insects. Poison sprays only kill if eaten, while Red Arrow Pyrethrum Spray kills every insect it strikes. 1 oz., 35c; 4 oz., $1.00; 1 pt., $2.50; 1 qt., $4.00; 1 gal., $12.00.

ROTECIDE
The Standard Rotenone Spray

The Standard Rotenone Spray is the most modern and fool-proof method of insect control. Rotecide is a complete spray, simply add water. It kills every type of insect, worm or beetle. Very good for Mexican bean beetle. Harmless to delicate plants and non poisonous to humans, animals, and bird life.

1 oz., 35c; 8 oz., $1.00; pt., $1.75; quart can, $3.00; gallon can, $8.00.

NICO-ROTE—Nicotine Rotenone
Quart, $4.00; gallon, $12.00.

ROTENONE DUST

Strictly non-poisonous and proven to be the most practical, effective and economical insecticide for the control of insects attacking vegetable crops. Contains ¾% Rotenone, plus all the toxic (killing) ingredients of the rotenone bearing roots. Should be used at the rate of 15 to 25 lbs. per acre. 1 lb., 17c; 5 lbs., 73c; 25 lbs., $3.50; 100 lbs., $12.50.

SCALECIDE
—THE COMPLETE DORMANT SPRAY—

Prices—Qt., 65c; gal., $1.55; 5 gals., $5.50; 10 gals., $9.50; 15 gals., $11.25 (plus $2.00 deposit on drum); 30 gals., $18.50 (plus $2.50 deposit on drum); 50 gals., $26.00 (plus $3.00 deposit on drum). (Freight to factory to be deducted from refund.)

SLUG SHOT

(Hammond's.) Guaranteed to destroy potato bugs, cabbage worms, lice, fleas, beetles, striped bugs, etc., on currants, egg plants, melons, turnips, beets, etc.; canker worms and caterpillars on fruit and ornamental trees.

1-lb. sifter, 20c; 5-lb. pkg., 75c.

SNAROL

A ready prepared bait meal that means sure death for cut-worms, snails, slugs, sowbugs, and other garden pests. Harmless to vegetation, safest to use, not affected by rain or sprinkling. 1½ lb. pkg., 35c; 4 lb. pkg. 85c. Not Mailable.

STRAWBERRY DUST

85-15 Mixture successfully used for many years. 1 lb., 15c; 10 lbs., $1.00; 25 lbs., $2.25; 100 lbs., $6.50.

SULPHUR

Commercial Flour of Sulphur. 1 lb., 6c; 10 lbs., 50c; 25 lbs., $1.00; 100 lbs., $2.70.

Superfine Dusting Sulphur. 1 lb., 10c; 10 lbs., 70c; 25 lbs., $1.25; 100 lbs., $3.60.

DRITOMIC SULPHUR

4 lb. bags, 18c per lb.; 48 lb. bags, 12c per lb.; 96 lb. bags, 11c per lb.

SULFOCIDE
A Better Summer Spray

Sulfocide is a highly concentrated non-poisonous liquid sulfur fungicide—entirely distinct from lime-sulphur.

Prices — Pt., 50c; qt., 85c; gal., $2.25; 5 gals., $7.50; 10 gals., $13.50; 30 gals., $33.00; 50 gals., $50.00.

TAROCIDE

A very dependable dormant spray for trees, kills the eggs of aphis, red mite, pear psylla, scale insects, etc. Mix 1 to 20. 54 gallon drum, 30c gallon; 28 gallon drum, 32c gallon. (Plus $1.50 deposit on drum, returnable.)

TOBACCO DUST

Excellent insecticide and fertilizer combined, extensively used against black and green aphis, fleas, beetles, etc. Finely powdered and high in nicotine content.

1 lb., 10c; 10 lbs., 50c; 100 lbs., $3.00; ton, $50.00.

TOBACCO STEMS—Valuable as fertilizer and humus—10 lbs., 35c; 100 lbs., $1.85; ton, $30.00.

TRI-OGEN
The all-purpose spray

A highly concentrated insect spray and fungicide for garden and greenhouse plants. Stimulates plant growth and is harmless to foliage or blooms. Small kit (makes 16 quarts), $1.50; medium kit (makes 64 quarts), $4.00.

TREE TANGLEFOOT

Applied directly to the bark of trees, protecting them from climbing insect pests. Easily applied and will remain sticky for three months fully exposed to the weather.

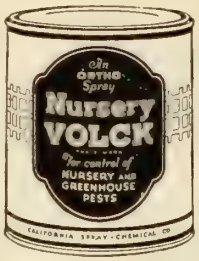
1-lb. can, 65c; 5-lb. can, $3.00; 10-lb. can, $5.65.

WILSONS O. K. PLANT SPRAY

For aphis, thrip, mealy bugs, scale, rose bugs, and other insects. ½ pt., 40c; qt., $1.00; gal., $3.00.

VOLCK

For Safe and Sane Control of Nursery, Garden, and Greenhouse Insects



VOLCK is one of the most powerful insecticides known. Even mildews and rusts are prevented and stopped by VOLCK. Not only does VOLCK give effective control of pests, but it also prevents reinfestation for a considerable period; is odorless, colorless and non-poisonous.

Volck Does Not Burn the most tender foliage. Coleus, cyclamen, evergreens, ferns, orchids and many other types of plants can be sprayed with safety.

Prices — ½-pint cans, 35c; 1-quart cans, 75c; 1-gallon cans, $2.00; 5-gallon cans, $6.25.

FAIRMOUNT

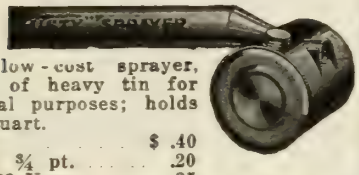
The Original Weed Killer

The Standard since 1892. Positively destroys any kind of weed and vegetation wherever applied. One gallon Fairmount Weed Killer makes 50 gallons of treating liquid, sufficient to effectively cover 100 to 150 square yards. Just the thing for driveways, tennis courts, baseball diamonds and walks where weeds are not wanted. Will not injure or discolor marble, gravel or stone—but makes them clean and bright. Fairmount Weed Killer acts by destroying seeds, germs and roots of plants.

Qt., 70c; ½-gal. can, $1.00; 1-gal. can, $1.75; 5-gal. can, $7.25; 30-gal. drum, $33.00.

SPRAYERS

THE "MISTY" SINGLE ACTION



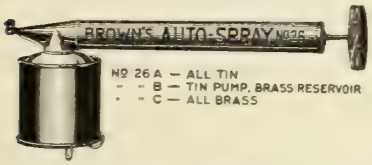
A low-cost sprayer, made of heavy tin for general purposes; holds one quart.

Misty	$ .40
Acme, ¾ pt.	.20
No. 222 Vapor	.25

GLASS JAR SPRAYER

Holds one quart; has long, powerful pump; two discharge tubes, which send the spray over a wide area. Price, 75c.

All brass, two nozzle, 65 lb. pressure continuous sprayer. All purpose including oils, lacquers, etc. Sturdily built, easy to operate, $1.85 each.



This continuous atomizer will spray insecticides in a continuous fog of great volume. Unequaled for small garden and house plant sprays.

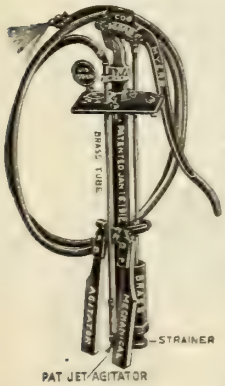
No. 26BG—Brass Pump, glass container	$1.15
ACE SENIOR, 1 Quart	.70

No. 26-D—Heavy brass pump and copper tank. $1.50.

CONTINUOUS

No. 432—1 Quart Capacity	$ .75
No. 435NS—3 Quart Capacity	1.35
No. 26F—2 Quart Capacity	1.50
Blizzard—1 Quart Copper Tank	1.50

COG-GEAR BARREL SPRAY PUMP



The construction is such that the entire pump sets inside the barrel containing the liquid, being bolted fast at its upper end to the head of the barrel.

Has bronze ball valves and brass seats. The air chamber is 32 inches in length, enabling the pump to throw a uniform, constant and elastic spray.

It has good leverage, is very powerful and easily operated. Complete with 15 feet of ½-inch, 5-ply hose, Vermorel or Bordeaux nozzle and agitators. Price, No. R305B, $15.00. No. R318B (Illustrated), $16.00. No. R308B, $25.50.

PERFECTION

This is the most powerful machine in its class. The barrel is 7½ inches in diameter and 20 inches high. The pump is 1¾ seamless brass tubing. The valves are metal and work automatically from 8 to 15 minutes, and may be recharged in 12 seconds. Galvanized Steel, $5.75; Copper, $8.75.

HUDSON JUNIOR SPRAYER

Capacity about 2½ gallons. Shipping weight 8 pounds. No. 140G, Junior with galvanized tank, $4.50; No. 140B, Junior with brass tank, $7.00.

HUDSON ECONOMY SPRAYER

The Economy sprayer meets the demand for large capacity at a minimum cost. (No. 125.) Capacity 3¾ gallons. With galvanized tank. $5.35.

HUDSON LEADER SPRAYER

A real value in the compressed air sprayer field. Well constructed throughout. 3½-gal. capacity galvanized tank fitted with funnel top. No. 192GF, $2.75.

HUDSON THRIFTY SPRAYER

Capacity about 2½ gallons. No. 120G, galvanized, $2.75.

HUDSON CLIMAX

3½ gallon capacity. No. 135GF. Galvanized, $4.25.

HUDSON STERLING SPRAYER

A high grade sprayer at a very moderate price. 3¾-gallon capacity tank. 115GF galvanized, $5.00; 115B copper, $7.50.

Perfect

LITTLE GIANT AND PEERLESS BUCKET SPRAY PUMPS

Made entirely of brass, malleable footrest, provided with large air chamber and throws a continuous spray. Price, with 4 ft. ½-inch hose and two nozzles, $3.75.

PERFECT LEVER BUCKET SPRAY PUMP

The air chamber is 50 per cent larger than the Little Giant Sprayer. Price, complete with agitator, hose and nozzle, $6.00. 8-foot extension pipe, 75c.

BROWNS OPEN-HED

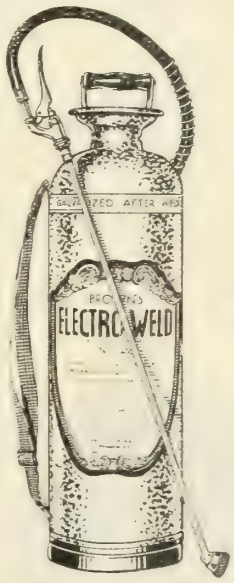
Electrically welded seams and galvanized after fabrication. Double acting pump lock, tank opening 5 in. in diameter, can easily be wiped dry to lengthen life of sprayer, tank guaranteed for 100 lb. pressure, rubber double grip pump handle.

No. 4B—Brass, 4 gal. swivel nozzle $9.90

No. 4D—Galv. 4 gal. swivel nozzle $6.50

No. 3B—Brass, 3 gal. plain nozzle .. $8.90

No. 3D—Galv., 3 gal. plain nozzle .. $5.65



BROWN'S No. 400 SPRAYER

A sprayer designed to give maximum service, electrically welded seams, funnel shaped filler opening for easy filling, 2-inch diameter solid brass pump cylinder, 4-gallon capacity.

Galvanized, $4.45; Brass, $7.65.

BROWN'S JUNIOR SPRAYER

An inexpensive compressed air sprayer, well constructed. 2½-gal. capacity. No. 37D galvanized, $3.95; No. 37B brass, $6.00.

AUTO SPRAY No. 9

Capacity 3½ gallons. Galvanized, $4.95.

AUTO SPRAY No. 50

Capacity 2½ gallons. Brass, $7.00; Galvanized, $4.50.

BROWNS BLUE RIBBON JR.

2-gallon capacity. Galvanized, $3.85.

JUNIOR No. 5 BUCKET SPRAYER

Price, $3.00.

HUDSON DU-MORE SPRAYER

A continuous high pressure sprayer adapted for all truck and field crops. Capacity 4 gallons. No. 147G, galvanized tank. $14.00.

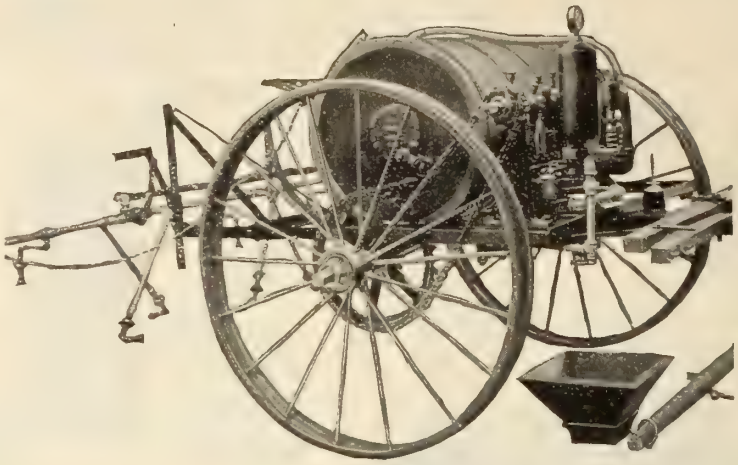
IRON AGE TRACTION AND POWER SPRAYERS

No. 511N2, Traction, 50 gallon barrel, 50 inch steel wheels, single action pump, two row six nozzle spray bar. **$120.00.**

No. 512N2, Traction, 50 gallon barrel, 50 inch steel wheels, double action pump, two row six nozzle spray bar. **$135.00.**

No. 357N. (As Illustrated.) Traction, 100 gallon tank, 50 inch steel wheels, triplex pump, vertical strainer, 6 row 12 nozzle spray bar. $278.25.

No. 365N. Power, 100 gallon tank, 50 inch steel wheels, duplex pump (300 pounds), 4 row 12 nozzle folding spray bar, 2 horsepower Novo Engine. **$388.50.**



LOW DOWN SPRAY PUMP

R309B. This is an entirely new type of pump, with double the power of any other. Fitted with removable 2½-inch brass cylinders and poppet valves, and adapted for the use of hot or cold mixtures. They are built for use in extensive spraying operations of any kind, as their capacity is sufficient to carry from 1 to 3-leads of hose. Complete with 6 feet wire bound suction hose, 15 feet of 7 ply discharge hose, 8-foot extension pipe and one Fembro nozzle. **Price, $43.00.**

Illustrating No. 316B with No. 1 Attachment.

No. 316B. Complete outfit, cog gear double action Spray Pump mounted on platform with very substantial 50-gallon barrel. Mechanical agitator, pressure gauge, 15 feet of ⅜-inch, 7-ply discharge hose, nozzle, 8-foot pipe extension and lever shut off. Equipped with No. R309B low down pump described above. **Price, $54.00.**

No. 1. Three row spraying attachment, for use with No. 316B Sprayer as shown in illustration. Very economical equipment for market gardeners, can be very effectively used for spraying beans, potatoes, tomatoes, etc. Adjustable for any width row. **Price, $20.00.**

SUNSHINE WHEELBARROW SPRAYER

Especially useful for spraying operations where large capacity but compact construction are required. Has two 16-inch wheels, 5-foot spray hose, 2-foot extension and angle nozzle. Capacity 12½ gallons. **$12.50.**

IDEAL PORTABLE SPRAYER

An ideal wheelbarrow type sprayer with 18-gallon galvanized tank and operated with a large removable barrel pump. The frame is made of heavy steel tubing reinforced with channel iron cross braces. Discharge equipment consists of 6-foot spray hose, 4-foot extension pipe, an Ideal angle nozzle, and leakless shut-off. **No. 34S** (illustrated), **$19.50.** Above outfit with air pressure tank and 200-pound pressure gauge, **No. 35S, $29.25.**

Brown's No. 30D—12-gal. capacity, **$13.05**
Brown's Mighty—15-gal. capacity, **$37.75**

MYERS "HANDY"

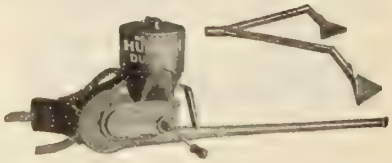
The Myers Handy Portable Sprayer is made for general use about the home, greenhouse or orchard, for spraying or whitewashing. Fitted with cog gear handle. Has the No. R318B pump, rigidly placed in an extra heay galvanized iron tank of 12½ gallon capacity. Complete with dasher agitator, 15 feet ½ inch 5-ply discharge hose, extension rod and nozzle. **Price, $25.00.**

MYERS POWER SPRAYERS

No. 1079 JR. 100 gallon tank, 4 row 12 nozzle spray bar, with 2 horsepower Novo Engine, **$330.00.**

No. 754. Orchard, 100 gallon tank, with 2 horsepower engine, **$295.00.**

HUDSON DUSTERS



No. 608

Very effective for controlling insects on beans, potatoes, tomatoes, cabbage, melons, cucumbers and other garden truck.

All parts are pressed from lead coated sheet steel, attractively painted and finished. Gears are steel, machine cut, housed in a dust proof case filled with oil. All bearings are self lubricating. Discharge equipment consists of two nozzles, two elbows, a Wye connection, and four 15-inch tubes. Can be used with one or two nozzles, arranged for dusting from above or under surface of low lying plants, shrubs, etc.

No. 606—Simple in construction, light in weight, well balanced and very effective in operation. Rotary agitation prevents clogging. Capacity 3½ to 7 pounds, depending upon material used. **$10.00.**

No. 608—Develops unusually powerful air blast and has two agitators, one rotary and one oscillating. Capacity 5 to 10 pounds, depending upon the material used. **$12.50.**

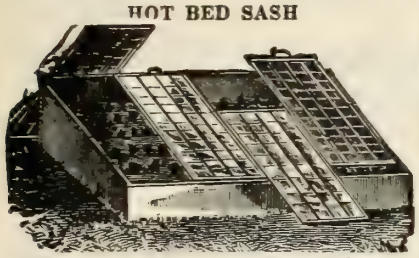
CRYSTAL DUSTER

A large capacity single barrel producing a voluminous cloud of dust. Especially useful for the gardener having a moderate amount of dusting to do. **Price, $1.30.**

HUDSON DUSTERS

Patrol, as illustrated, **$1.15.**
Cadet, Powder Reservoir, 3x4 inch, each, **40c.**
Major, Powder Reservoir, 4x4½ inch, each, **80c.**

HOT BED SASH



Finest quality; white pine lumber, free from knots, substantially made, grooved for glass to lap or for putty (unglazed). $1.75 each; 10, $16.50.

HOT BED GLASS

1 box of glass will glaze 3 sash, 8x10 and 10x12. $2.50 per box.

HOT BED MATS

Burlap. Made of strong burlap interlined with wool.

Size, 40x76 inches, each.....$1.50
Size, 76x76 inches, each..... 2.60

MILO WATERPROOF HOT BED MATS

Made from heavy weight burlap, absorbent pulp and felt cemented together with a specially prepared waterproof compound. This combination forms a covering both airtight and waterproof. Easy to handle. Wear for years. Milo mats are made in sizes 40x78 inches and 78x80 inches, also in continuous lengths. 40x78 inch, $1.50 each; 78x80 inch, $3.00 each.

MARLINE

Made from Indian Hemp and the best product in making Straw Mats. Furnished in 1 and 5-pound balls. Per pound, 25c.

PEERLESS GLAZING POINTS

Price, per box of 1,000, 65c. Pincers, per pair, 70c; by mail, 75c.

PUTTY BULBS

A very useful tool for applying liquid Putty and Mastica for glazing Sash or Greenhouses. Large size, $1.15.

MASTICA

For glazing greenhouses, sashes, etc., new and old. It is elastic, adhesive and easily applied. It is not affected by dampness, heat or cold. Price, 1 gal., $2.25.

MASTICA GLAZING MACHINE

Price, $2.25

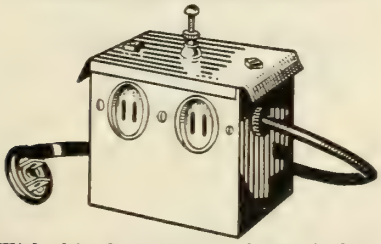
TWEMLOW'S OLD ENGLISH GLAZING PUTTY

Semi-Liquid

For bedding glass in sash and filling cracks or seams in roof joints or frames of greenhouses or hotbeds.

16-pound can (1 gallon capacity), $2.35

ELECTRIC HOT BED HEATER



With this thermostat and 2-60 ft. heating cable, four sash, or a total surface 6 ft. by 12 ft., can be economically heated. B-47 Thermostat only. Weight 4 lbs., $5.00 each. B-48 60 feet heater wire. Weight 7 lbs., $4.00 each.

GALVANIZED WATERING POTS "WIDE SPOUTS"

Made of heavy galvanized iron, with removable Sprinkler.

4 qt.	6 qt.	8 qt.	10 qt.	12 qt.	16 qt.
$ .55	$ .65	$ .75	$ .80	$ .90	$1.10

HOSE NOZZLES

Mystic Spray Nozzle.....$ .30
Justrite Spray Nozzle..... .45

WOODEN LABELS

	Painted	Plain
4 inch pot, per 1,000.....	$1.70	$1.40
4½ inch pot, per 1,000.....	1.80	1.45
5 inch pot, per 1,000.....	1.90	1.50
6 inch pot, per 1,000.....	2.10	1.70
12 inch pot, per 100.....	...	.75
3½ inch Tree, iron wired....	1.90	1.50
3½ inch Tree, copper wired.	2.00	1.60
8 inch Garden, per 1,000...	4.85	...
10 inch Garden, per 1,000...	6.00	...
12 inch Garden, per 1,000...	8.50	...

Prices, per 100—3½ to 6 in., 35c; 8 in., $1.00; 10 in., $1.25; 12 in., $1.75.

HARDWOOD FAN TRELLIS

Very durable and artistically made; will not scorch the most tender plant, and is far superior to any metal trellis.

30 in. x 13 in.	$ .60	6 ft. x 38 in.	$2.10
36 in. x 16 in.	.95	7 ft. x 42 in.	2.50
4 ft. x 27 in.	1.50	8 ft. x 46 in.	2.95
5 ft. x 32 in.	1.80	10 ft. x 72 in.	3.80

FLOWER POTS

We carry a complete line of Regular Pots, Azalea Pots, Bulb Pans and Saucers in stock and quote as follows:

Size	Each	Dozen	100	1,000	Saucer Each
2 in..	$ .02	$ .15	$1.00	$8.45	.
2½ in..	.03	.20	1.40	11.25	.
3 in..	.03	.25	1.75	14.65	.
4 in..	.05	.45	2.70	22.50	$ .03
5 in..	.07	.70	4.85	....	.05
6 in..	.10	1.00	7.25	....	.06
7 in..	.15	1.50	12.00	....	.08
8 in..	.25	2.50	16.75	....	.11
9 in..	.35	3.50	24.00	....	.15
10 in..	.45	4.50	32.00	....	.18
11 in..	.65	6.50	50.00	....	.22
12 in..	.75	7.50	64.00	....	.25

NEPONSET FLOWER POTS

Made of waterproof paper, extensively used for starting seeds and seedlings in frames and hot houses.

	Doz.	100	1000
2¼ in.	$ .10	$ .35	$2.10
2½ in.	.10	.40	2.55
3 in.	.10	.50	3.25
3½ in.	.15	.60	4.15
4 in.	.15	.70	5.00
5 in.	.20	.80	6.60
6 in.	.20	1.00	8.90

CEDAR PLANT TUBS

(Richmond Style)

Made of Selected Virginia White Cedar, bound with electric welded hoops, painted green.

No.	Inside Top Dia.	Inside Bot. Dia.	Inside Depth	Price
5	10	7½	9	$ .55
7	12	9	11	.85
9	14	11	13	1.25
11	16	12½	15	1.55
13	18	14½	17	2.25

WATERPROOF PLANT BANDS

Ready-to-Use Plant Bands. They are ready to use and no time is lost in setting them up.

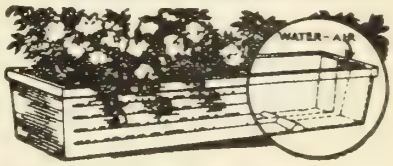
Size	Depth	Per 5,000	Per 1,000	Per 250
2x2 in.	2½ in.	$10.50	$2.25	$ .75
3x3 in.	3 in.	13.75	2.90	1.00

Modern Bands—
35c per 100—$2.50 per 1000.

BAMBOO PLANT STAKES

3 ft. Light	$ .65 per 100	$5.00 per 1,000
5 ft. Heavy	.55 per doz.	3.50 per 100
6 ft. Heavy	.65 per doz.	4.50 per 100

PERFECTO FLOWER BOX



The Perfecto is an ornament in good taste for any home and is constructed with this purpose in view. The finish is enamel, in either of three colors—Green, Old Ivory or Red. They measure 6 inches deep and 7 inches wide.

20 in.	26 in.	32 in.	38 in.	44 in.
$1.00	$1.25	$1.50	$2.00	$2.50

BEACON FLOWER BOX

Galvanized with green enamel finish—efficient waterer and ventilator. 8½ inches wide and 6 inches deep.

24 in.	30 in.	36 in.
$1.10	$1.25	$1.50

GALVANIZED HARD STEEL WIRE PLANT STAKES

Very durable, neat and strong, and extensively used for carnation and rose beds. No. 8 gauge.

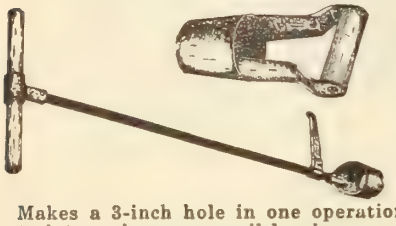
Height	Doz.	100	1,000
3 ft.	$ .25	$1.50	$12.85
3½ ft.	.30	1.75	15.00
4 ft.	.35	2.00	17.25
5 ft.	.40	2.35	21.50

DIBBLES

Decidedly the best tool for transferring plants.

Aluminum bent handle	$ .75
All steel, bent handle	.60
Wood bent handle, steel point	.50
Steel points for same	.35

HOLE-IN-ONE TOOLS



Makes a 3-inch hole in one operation, cuts into and removes soil leaving a perfectly flat bottomed hole. 5 inch D handle, 50c. 32 inch handle with adjustable foot rest and depth regulator, $4.00.

HAND GARDEN FORKS

No. 2. 11 inches long, hardwood handle, 3 tines, Japanned. Price, 40c.
No. 3. 10 inches long, hardwood handle, 4 tines, Japanned. Price, 30c.

ASPARAGUS KNIFE

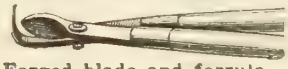
No. 0	25c
No. V223	40c

ASPARAGUS BUNCHER $3.50

GARDEN TROWELS

	Each
6-in. Steel Blade, Malleable Shank	$ .15
6-in. Extra Strong, Hollow Back	.35
6-in. Solid Steel, Bronzed and Polished	.50
6-in. American Solid Steel, Hollow Back, finely finished	.50
5-in. Solid Steel, Forged Shank	.60
6-in. Florists' favorite, solid steel forged, Shank and Blade one piece	.75

LOPPING SHEARS



No. 6 Forged blade and ferrule	$1.40
No. 4 Handy Andy (9-in. handles)	1.45
No. 3 American Draw Cut (22-in. handles)	2.40

PORTER POINT CUT No. 1—20 and 24 inch steel handles, adjustable drawcut. $4.50.

THERMOMETERS

	Price
10-inch, Hardwood Cabinet	$ .60
12-inch, Tin, Japanned, Hot-Water Reg.	1.00
Mushroom Bed and Hot Bed, Brass Point	2.00

AMERICAN EDGING KNIVES

All Steel. Price, $1.00.

PRUNING SAW

18-inch	$1.25
20-inch	1.35

NORCROSS CULTIVATOR

The Norcross is an adjustable garden cultivator of 5 blades. A very handy garden tool. By removing the center tooth you can straddle the rows. The teeth can be made to set close or wide apart. Can be detached from handle and attached to any wheel hoe.

Price, $1.00.

MIDGET NORCROSS

3-prong, short handle	Price, 50c
3-prong, long handle	Price, 80c

MAGIC WEEDER

A perfect and efficient tool, made of best tempered steel and furnished with 6 and 18-inch handle. Price, 15c and 20c.

GRAFTING WAX

Trowbridge Brand.
Price, ¼ lb., 15c; lb., 50c.

FRUIT PICKER

Made of galvanized hard-steel wire, shaped so as to imitate the human hand. Without pole. Price, 50c.

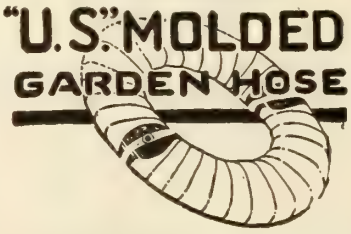
GRASS SHEARS

These tools are very handy because of the vertical movement of the handles.

Grass Shear (Standard)	$1.50
Grass Shear (Long Handle)	2.50
Pruner	1.25
Snip-Itt (illustrated)	1.00

V-4—Polished blade, enameled malleable handle. 45c each.

V-1—Hollow ground high polished blade, enameled finger grip malleable handle, offset 1½ inches, improved latch. 85c each.



RAINBOW BRAND—Double braid, finest quality; ⅝ inch. 12c ft.; 50 ft. lengths with couplings, $5.75 each.

REMNANTS—⅝ inch double braid, 10 to 24 ft. lengths, couplings attached. 7½c per ft.

"LITTLE WONDER" HEDGE TRIMMER

Hand Driven—30 in., $25.00; 40 in., $27.50; 60 in. $35.00.

Electric with 15 ft. of wire, 27 in., $55.00; 36 in., $95.00; 60 in., $100.00.

GRASWIPS

V-165—The new double edged long handled grass cutter. Use it like a golf club, cuts rapidly on both the forward and backward swing. Each, 85c.

TREE PRUNER

8 ft.	$1.80
10 ft.	2.00
12 ft.	2.20

LITTLE GIANT PRUNING HOOKS
Without pole, $2.00 each

HANGING BASKETS
Enameled green

10 in.	20c
12 in.	25c

HINGED HANGING BRACKETS
For same 15c each

HEDGE SHEARS

Triumph Serrated		Style K101-T (with oil cup)	
VST08, 8 in.	$2.00	9 in.	$2.00
VST09 9 in.	2.25	10 in.	2.20
K-101D 9 in.	1.40	12 in.	2.50

PLAIN—6 in., 85c; 8 in., $1.25

THE RODERICK MOLE TRAP

Self-setting by pressing down on lever. Very convenient feature, found on no other trap. Made from best spring steel, thoroughly galvanized. Simple and durable in its construction.

Price, 85c.

OUT-O'-SIGHT MOLE TRAP

This, while possessing all the good qualities of other traps, is especially adapted for setting under glass in hot beds. Price, $1.25.

PRUNING SHEARS

	Each
No. V R 10 Tempered steel blades, green enamel handles, coil spring, 8 in.	$ .50
No. V 179 Tempered blades, polished; black handles; 9 in.	.85
No. V 139 Half polished, adjustable lock nut, renewable blade, 9 in.	1.25
No. V149 Forged full polished blades and handles. Brass spring, ratchet lock. 9 in.	1.80

Here's a new and increasingly popular type of glove—for **men** and **women**—specially designed for garden wear. Just the thing you've been looking for.

All - Leather DIRT-PROOF
SOFT AS KID Easy to Wear

Sizes: Small, Medium, Large for Women; Medium and Large for Men, 75c. pr.; 2 prs. $1.40 postpaid.

MANURE FORKS (Meadow Monarch)

12½-inch tines, 4½ foot handle, strap ferrule. 4 tines, $1.00; 5 tines, $1.15; 6 tines, $1.30. Malleable D-Handles same prices as above.

HAY FORKS (Meadow Monarch)

Three 12-inch tines, 6-foot straight handle, Strap Ferrule. Price, $1.10.

SPADING FORKS

Farm King—Heavy, five 11-inch tines, D-Handle, Strap Ferrule. Price, $1.70.

Jumbo—Four 11-inch tines, D-Handle, Strap Ferrule. Price, $1.55.

Boys' Spading Forks—Four 8-inch tines, D-Handle, Plain Ferrule. Price, 65c.

ENSILAGE FORKS (Continental)

Ten 16-inch Oval tines, 2½-foot D-Handle, Strap Ferrule. Price, $2.40.

POTATO HOOKS (Continental)

Round Steel Tines, 4½-foot Handles.

Five 6½-inch tines.....Price, $1.10
Six 6½-inch tines.....Price, 1.20
Five 7-inch tines, heavy.....Price, 1.25

GARDEN HOES

Meadow Monarch—Solid Socket Pattern (no rivets), 6 to 7½-inch Blades, 4-foot Handle. Price, 85c.

Ladies' Hoe, Meadow Monarch—5-inch Blade, 4-foot Handle. Price, 65c.

WARREN HOES

Continental—Heart Shaped, large size 7½-inch. Price, $1.05.

WEEDING HOES

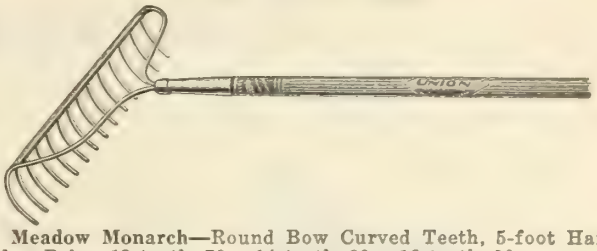
Acme—(Pressed Steel), Double Prong, 4½-inch Blade, 4 1/3 foot handle. Price, 75c.

Forged Steel, Double Prong, 3⅝-inch Blade, 4 1/3 foot handle, 8¼ inch head. Price, 75c.

FLORAL SETS

Consisting of Shovel, Hoe and Rake. Price per set, $1.45.

STEEL GARDEN RAKES



Meadow Monarch—Round Bow Curved Teeth, 5-foot Handle. Price, 12 teeth, 70c; 14 teeth, 80c; 16 teeth, 90c.

Meadow Monarch—Level Head Curved Teeth, 5½-foot Handle. Price, 12 teeth, 65c; 14 teeth, 70c; 16 teeth, 75c.

BROOM RAKES

Continental—22 14-inch Flat Teeth, 4-foot Handle, Flexible Spring Steel. Price, 75c.

WIRE LAWN RAKES

Meadow Monarch—24 2-inch Teeth, 5-foot Handle, No. 9 Steel Wire. Price, 70c.

WOOD LAWN RAKE

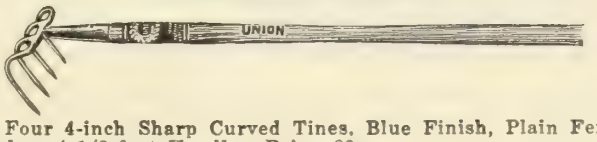
3 Wire Brace, 24 teeth, 60c; 1 Wire Brace, 20 teeth, 50c.

WOOD HAY RAKE. 2 Wire, 10 teeth, 40c.

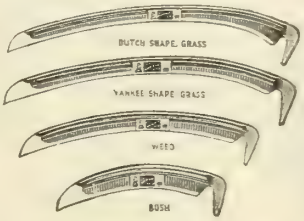
TURF EDGERS

Socket Pattern, 9-inch 1/3 Polished Blade, Green Finish, 4-foot Handle. Price, 90c.

SPEEDY CULTIVATORS



Four 4-inch Sharp Curved Tines, Blue Finish, Plain Ferrules; 4 1/3-foot Handle. Price, 80c.



SCYTHES	Price
Best American Grass	$1.40
Bush or Brier Scythes	1.40
English T. Waldron	2.50
Little Giant Dutchman	1.45

IMPORTED GERMAN SNATH
$2.25 Each.

SNATH or SCYTHE HANDLES
Patented Fasteners.Price, 1.50
Bush Snath, heavy..Price,..1.50

GRASS AND BRUSH HOOKS

	Price
American Grass Hook, V B 3.	$ .45
American, No. K-1	.35
German Grass Hook	.50

BRUSH HOOKS

For shrubbery and underbrush.
Tempered Steel, No. 10 (with handle).....Price, $1.35

LIGHTNING HAY KNIFE

Crucible Steel.....Price, $1.75

CHAMPION POTATO SCOOP

Heavy wire potato and vegetable scoop, D Handle.....$2.00

SHOVELS

Round or Square Point. Long or D-Handles.

No. 2...$1.05 No. 3.. $1.10
No. 4... 1.15

SPADES

O.K. Champion, solid back D Handle, $1.35.

Nursery, extra heavy D-Handle, full strap. Price, $4.25.

POST-HOLE DIGGERS

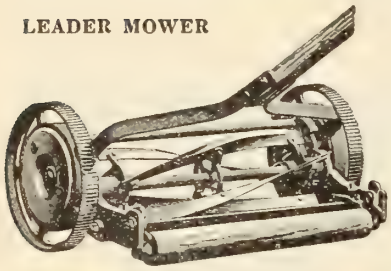
Baldwin Brand.....Price, $1.75

EARTH AUGER	Price
Bores holes 8 to 14 inches in diameter, 3½ feet deep	$6.00
Bores holes 8 to 16 inches in diameter, 3½ feet deep	6.75

QUALITY LAWN MOWERS

All reliable, successful brands on which repairs are always easily obtained.

LEADER MOWER



Ball Bearing, 4 blades. Very light running. Wheels 9 inches high; reel 6 inches in diameter; all latest improvements; noiseless action; keen cutting; self-sharpening; high speed.

14 in. $5.15
16 in. 5.35
18 in. 5.75

TERRACE SPECIAL PLAIN BEARING MOWER

3 Blades, 8-inch drive wheels. 12 in., $4.10; 14 in. $4.35; 16 in., $4.60.

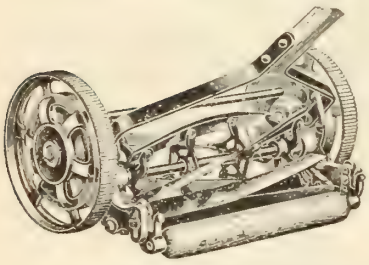
PHILA. STYLE K. ROLLER BEARING MOWER

5 Blades, 10-inch drive wheels. 14 in., $17.50.

METROPOLITAN BALL BEARING MOWER

5 Blades, 10-inch drive wheels. 16 in., $6.75.

GREENWOOD BALL BEARING MOWER



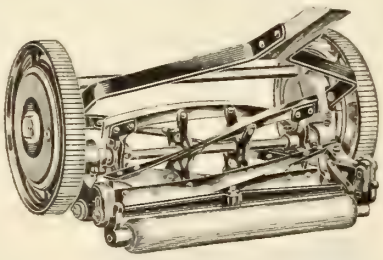
The highest quality has been built into this mower, an outstanding value. Wheels 10 in. diameter, roller bearing, 5 extra heavy fine quality heat treated crucible steel blades, self-sharpening.

14 in. $7.25
16 in. 7.75
18 in. 8.00

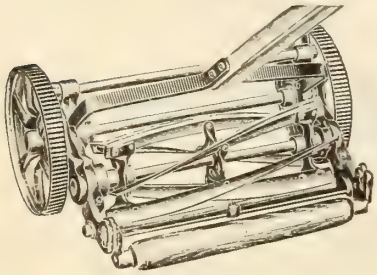
GOLDEN ARROW BALL BEARING MOWER

This unusual mower is a combination of Superior Features, including "Wear Forever" ball type driving ratchets. Wheels 10 in. diameter, roller bearing, nickle plated hub caps, 5 crucible steel blades, self-sharpening.

16 in. ..... $ 9.25
18 in. 10.00

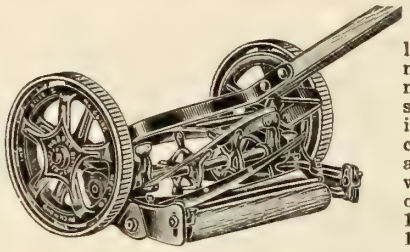


KING HIGH GRASS MOWERS—BALL BEARING



Driving wheels 10 in. high; 6 in. ball bearing revolving cutter; 5 crucible steel blades, hardened and tempered in oil.

14 in. $12.00
16 in. 12.75
18 in. 13.25



NOBRAKO

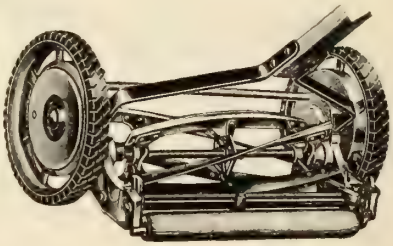
The unbreakable lawn mower made of malleable iron, commonly known as all-steel, 6 inch ball bearing, 5 blade revolving cutter; 10½ inch Hyatt roller bearing wheels. Silent in operation.

16 in. $10.50
18 in. 11.25

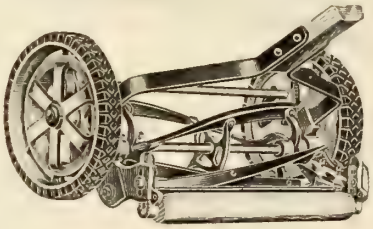
HIGH SPEED BALL BEARING MOWER

A special high grade mower; cuts the thickest grass fine and close. Patented adjustment for center of stationary knife; drive wheels 11 in. in diameter, with solid rubber, non-skid tires; 5 blades; 6 in. ball bearing revolving cutter; knives crucible cast steel, hardened and tempered in oil; self-sharpening.

14 in. $7.75
16 in. 8.25
18 in. 9.00



GLIDE BALL BEARING MOWER



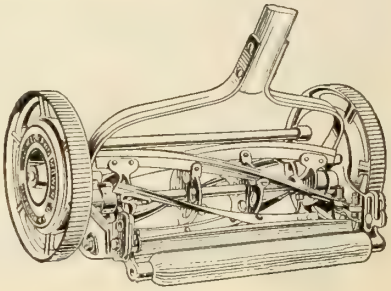
Wheels 10 in. diameter, with solid rubber, non-skid tires; ball bearing; 5 heat treated crucible steel blades; 6 in. diameter revolving cutter.

14 in. $6.50
16 in. 6.75

AMBASSADOR

High grade, ball bearing, five blades, 10 inch wheel. Light and easy to handle.

14 in. $12.25
16 in. 13.00
18 in. 13.75



REVOLVING SPRINKLER

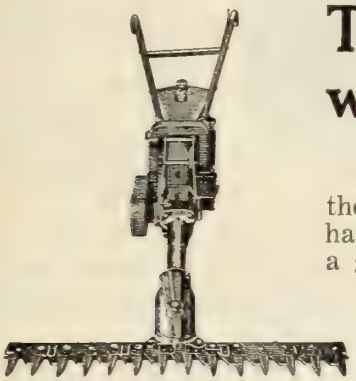
These sprinklers are compactly and strongly made with phosphor-bronze bearing.

Eureka Sprinkler, 12 inches high, Price, $1.50.

FOUNTAIN SPRINKLER
Made of Heavy Brass

Easily moved over the lawn without turning off the water. The mist-like spray is a veritable "thing of beauty." Price, 70c.

The GRAVELY MOWER works under every condition



Model D complete with Sickle Bar. Both type Mowers and other attachments can be purchased separately and will fit on either model Tractor.

As illustrated $328.00

Model D complete with Power Driven Sickle Mower (illustrated on the left) will cut everything . . . the rough places . . . spots where you've had to use hand scythes . . . even sprouts a full ½ inch thick . . . and, a great big swath every time.

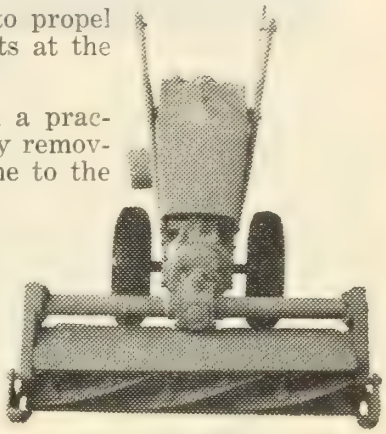
The rugged motor has ample power to propel both the tractor and run the attachments at the same time.

To this very same tractor you attach a practical, sturdy 30-inch reel type mower. By removing a few bolts you can change from one to the other. Two mowers for the price of one.

Both these and the attachments are shown merely to give you an idea of the range. Before buying or considering any mower let us first tell you more about the GRAVELY. Then, after knowing your conditions we will quote you a delivered price on the particular model and attachments suitable for your needs.

The GRAVELY GARDEN TRACTOR & MOWER — A MIDGET IN SIZE - A GIANT IN POWER!

"A Demonstration Is Yours For The Asking"



Model L as shown above has a 5 H. P. motor, 3 speeds (forwards and 1 reverse). 30 in. Rotary Mower. $351.50

GRASS COLLECTOR

Made of best quality duck with galvanized iron bottom, easily attached. Collectors, No. 1 for 12-14-16 inch, 90c; No. 2 for 18 inch, 1.00.

LAWN ROLLERS

These rollers represent all the latest and up-to-date improvements; they are fitted with hardened steel roller bearings which reduces the draft by 40 per cent; the counter-balance attached on the outside of the drum induces the handle to stand in an upright position. The outer edges of the drum are well rounded to prevent cutting.

No. 605 has plain bearings and no scraper.

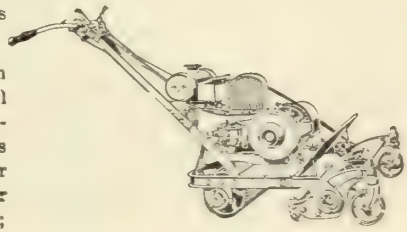
WATER BALLAST LAWN ROLLER

No. 601—14x24,	Empty 70 lbs.;	Filled 175 lbs.	$12.00
No. 602—18x24,	Empty 85 lbs.;	Filled 265 lbs.	14.25
No. 603—24x24,	Empty 110 lbs.;	Filled 420 lbs.	16.50
No. 605—14x24,	Empty 68 lbs.;	Filled 175 lbs.	9.50

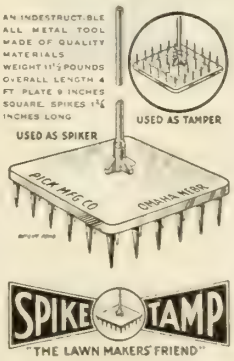
Cast Drum Rollers	Diameter Face	Total Length	Weight Pounds	Price
No. 504—2 section	20	20	250	$20.25
No. 507—2 section	20	24	300	25.25
No. 509—2 section	24	20	400	32.75

COLDWELL CUB POWER LAWN MOWER

Made by one of the oldest and most reliable manufacturers in the country.



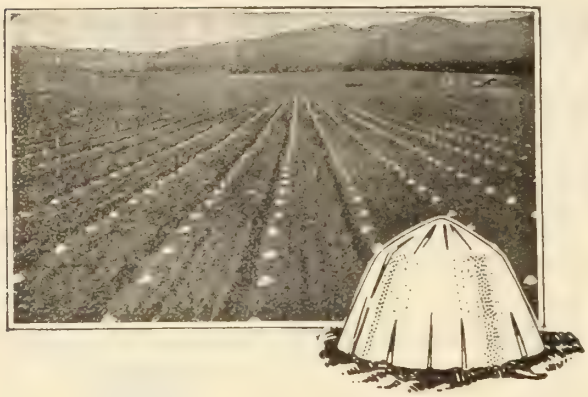
Five blades, 21 inch cut, ball bearing, full width drive roller, capacity 2 to 3 acres per day. Enclosed four cycle motor, water cooled; three speeds; fuel consumption 1 gallon gasoline for 10 hours cutting. Price $195.00. Grass Box Attachment, $12.00.



SPIKE-TAMP

A wonderful lawn tool for use when seeding or top dressing. For spiking hard areas. Saves money on seed, plant food and water. For use in pulverizing clods in the garden. Perpetually guaranteed against breakage. $3.50.

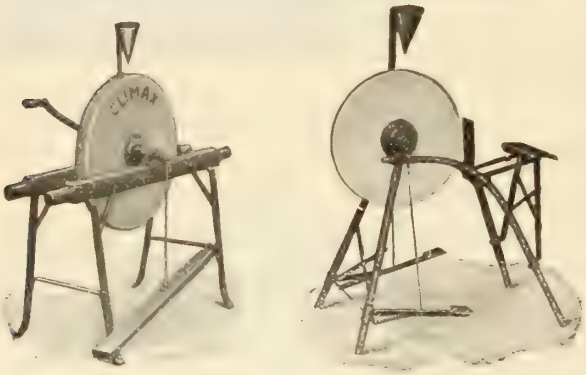
HOTKAPS



HOTKAPS can make many extra dollars for you this season by assuring you of earlier, bigger crops, and higher early-to-market prices. A patented wax paper cone which completely covers the plant and protects them from frost, rain, wind, ground-crusting and insects.

25 Hotkaps with Paper Setter.....$ .50
100 Hotkaps with Garden Set..... 2.40
250 Hotkaps with Garden Set..... 3.65
1000 Hotkaps..... $9.75 per 1000; 25,000, $9.45 per 1000
Steel Hotkap Setter and Tamper.....$1.50

MOUNTED GRINDSTONES



CLIMAX. Frame is a combination of wood and steel, well finished.
No. 3.....$8.00 Victor.....$8.75

KING. The frame is constructed of tubular steel, very rigid, ball bearing, adjustable seat, and equipped with treadles. Stone is 20-22 inches in diameter by 2-inch face...$9.25

CYCLE. Of angular steel, well braced, with sliding seat, ball-bearing bicycle treadles. Stone is 20-22 inches in diameter by 2-inch face of the best Berea grit.....$8.50

Loose Grindstones, 5c per pound. (40 to 200-lb. stones.)

WHEEL BARROWS

Buch's No. 1

Substantially made of seasoned wood, firmly bolted and braced.

Buch's No. 1. Size of body 30 inches long, 24 inches wide in front and 25 inches in back. Side-boards 12 inches high. $9.00.

Buch's No. 2. Size of body 28 inches long and 20 to 24 inches wide. Side-boards 12 inches high. $7.75.

Buch's No. 3. 26 inches long, 19 to 22 inches wide. Side-boards 12 inches high. $7.50.

No. 4. Boys' Barrow, body 22 inches long, 15 by 18 inches wide, side-boards 9 inches high. $5.85.

No. 67. Greenhouse size. $9.50.

No. 6B. Steel wheel, wooden body. $5.00.

No. 6½. Wooden Frame, steel wheel. Bed length 27 inches, width 22-inch and 17-inch; 20-inch wheel. $5.35.

No. 8

No. 8 Canal Barrow. With steel spoke wheel, full-sized bent tray, planed, cleated and strapped together, well finished. $5.60.

No. 20. Steel Pan, 4 cubic feet Capacity. Wooden Handles. $4.50.

No. 17-B

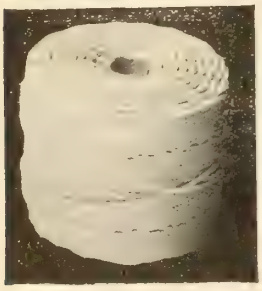
No. 17-B. Size of tray 32 by 27 inches; capacity 3½ cubic ft. $7.25.

No. 174. 4 cubic ft. capacity. $7.75.

No. 25

No. 25. All steel, tubular handles, riveted tray, high front to prevent spilling. Specially built for heavy work and rough usage. 3½ cubic ft. capacity. $8.25.

No. 165. 5 cubic feet capacity. $9.75.



Jute Cord
Cotton Cord
Hay Rope
Plow Lines
Binder Twine
Fodder Yarn

PRICES ON REQUEST

State Quantity Wanted.

SKINNER SYSTEM AUTOMATIC IRRIGATION

This system is always made to order to fit each particular plot. The nozzles deliver a fine mist-like spray. The Type "C" oscillator moves the lines slowly from side to side, so that this moisture is evenly distributed.

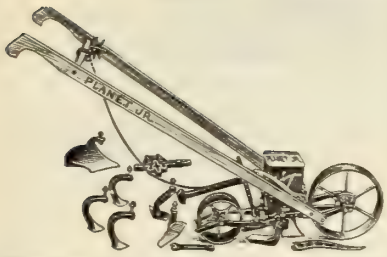
A very comprehensive catalog and complete information will be mailed to you upon request.

80 Page Catalog

Planet Jr. Garden Tools

Get Your Copy

No. 4



The No. 4 is a combination of the most useful tools for the home garden. Plants almost all vegetable seeds in continuous rows or in hills 4, 6, 8, 12 or 24 inches apart. A plow adjustable for depth opens a straight, narrow furrow, the seeds are dropped in it, are covered and the soil firmed and the next row marked out, all in the same operation. Can be converted into a Single Wheel Hoe by changing one bolt. Cultivating equipment includes the most useful attachments—hoes for weeding and shallow cultivation, cultivator teeth for deeper and general cultivation, and the plow for furrowing and ridging. Price, $17.50.

No. 4-D, a Seeder only. Price, $13.75.

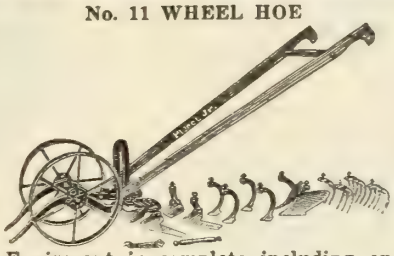
No. 300 DRILL SEEDER

A plate or disc seeder for all seeds from the smallest up to and including peas, beans and corn. Growers of peas and beans will appreciate this seeder as it does not break the seed and sows with great regularity. Only three plates each with thirteen holes, making ample adjustment for various seed. Hopper holds four quarts and is removable which makes easy filling and emptying. Net weight 36 pounds. Price, $19.00.

No. 220 FERTILIZER DISTRIBUTOR

Will distribute 100 to 2,000 pounds of commercial fertilizer to the acre. Six adjustable spouts spread from 4 to 30 inches. Equipment includes plates for closing up four spouts or three spouts on left side. Hopper weight placed over the wheel making lighter load and easier pushing. Feed can be opened and closed without stopping. Positive agitation. Price, $27.00.

No. 11 WHEEL HOE



Equipment is complete including one pair 6-inch and one pair 4½-inch hoes for weeding and shallow cultivation, four cultivator teeth for deeper and general cultivation, one pair of plows for plowing, covering and ridging, two 3-tooth and two 5-tooth rakes for fine close cultivation and a pair of leaf lifters which lifts the leaves or vines out of the way when the plants are more fully grown. Frame is adjustable for rows of different width. Price, $13.25.

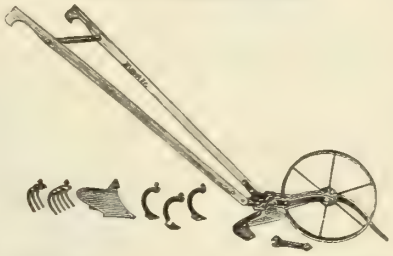
No. 12 WHEEL HOE

Same as No. 11, but less the rakes and 4½-inch hoes. Price, $10.50.

No. 13 WHEEL HOE

Same as No. 12, but with 6-inch hoes only. Price, $7.90.

No. 16 WHEEL HOE



Equipment very complete, including one pair of 6-inch hoes for weeding and shallow cultivation, three cultivator teeth for general and deeper cultivation, one plow with landside for hilling, ridging and plowing. One three-tooth and one five-tooth rake for fine close cultivation and one leaf lifter, which is useful for protecting overhanging leaves and vines. An ideal machine for the family garden. Price, $8.50.

No. 17 WHEEL HOE

Is of the same construction as No. 16, omitting the two rakes. Price, $7.50.

No. 17½ SINGLE WHEEL HOE

Equipment, one pair of 6-inch hoes, three steel cultivator teeth, one leaf lifter. Price, $6.50.

No. 18 WHEEL HOE

Frame and wheel as No. 16, but has for equipment one pair hoes only. Price, $5.50.

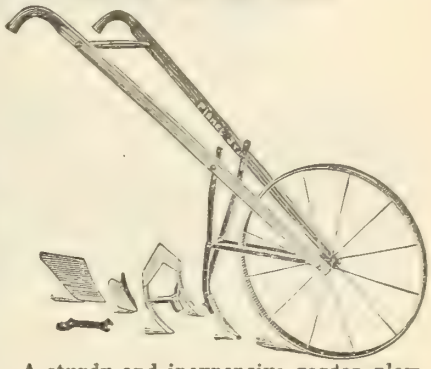
No. 19 GARDEN PLOW

An inexpensive, yet sturdy, garden plow and cultivator for the home garden. Attachments consist of plow, cultivator tooth, sweep and a five-prong cultivating attachment for fine work. Handles are adjustable for height. Price, $4.75.

No. 90-D 12-TOOTH HARROW

The fruit, berry and vegetable grower's favorite. Does fine, thorough cultivation. Expands to 32 inches; contracts to 12 inches. Price, $10.50.

No. 119 GARDEN PLOW



A sturdy and inexpensive garden plow and cultivator. For those liking the high wheel this tool is the favorite. Equipment includes a large plow, a scuffle blade and three cultivator teeth. Due to the high center of gravity this tool pushes very easily. Price, $3.75.

No. 8 HORSE HOE

Made almost entirely of steel, well braced and adaptable to any conditions. Frame of stiff steel, extra long and high, closes to 10 inches and opens to 25. Cultivator teeth are of high carbon beveled steel, thereby making them self-sharpening and the point retains its shape, greatly prolonging the life of the steel. Patent hillers are reversible for hoeing or hilling. Can be run close to the plants without endangering the roots. Handles adjustable up, down and sidewise. Price, $15.00.

No. 9-D HORSE HOE and CULTIVATOR

Same as the No. 8, less the depth regulator and steel lever wheel. Strong and light. Does perfect work. Price, $11.50.

No. 9-D PLAIN 5-TOOTH CULTIVATOR

Equipment: Four 3x8-inch cultivator steels; one 4x8-inch cultivator steel; lever expander. Hollow steel standards and steel draft hook. Simple, practical—always ready for work. Price, $10.00.

No. 4-D PLAIN CULTIVATOR

Same as the No. 9-D, but does not include lever expander. Patent beveled steel teeth. An every-day, all-day tool. Price, $8.00.

No. 101-D PLAIN CULTIVATOR

Equipment: Five 3x8-inch cultivator steels; lever expander. Lever is all steel; simplified and improved; works very easily. Just the tool for sandy soils or light cultivating. Price, $8.50.

No. 100-D PLAIN CULTIVATOR

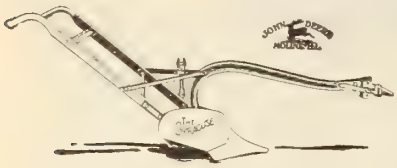
Same as the No. 101-D, less the lever expander. The right tool for sandy soils in this section. Price, $7.00.

No. 92-D PLAIN 12-TOOTH HARROW

No Wheel

A light, but effective cultivator for fine work—at a moderate price. Price, $9.00.

SYRACUSE CHILLED PLOWS



John Deere Syracuse Plows are the result of forty years study and experience in plow manufacture and "Quality" always has been the motto of the Syracuse Plow Company.

The Company has made a special study for years of shapes and the assembly of different materials in the same plow with the purpose of fitting properly a particular plow for a particular section.

Syracuse plows have proved their worth through years of use. They are scientifically designed, built of the best material obtainable and are equipped with attachments which will permit of a fine, accurate and reliable adjustment for governing the plow.

Prices quoted are subject to 5% cash discount. Wheel and Jointer extra.

One-Horse Plows

No. 50. Right, wood beam, light, one horse, making furrow 2 to 5 inches deep and 8 to 10 inches wide. $9.50.

No. 52. Right, wood beam, medium, one horse, making furrow 3 to 5½ inches deep and 9 to 11 inches wide. $13.75

No. 53. Right, wood beam, heavy, one horse or light two horse, making furrow 3 to 6 inches deep and 9 to 12 inches wide. $16.00.

No. 1464. Right, steel beam, $15.50.

No. 1465. Right, steel beam, $14.00

Two-Horse Plows—Wood Beam

No. 603. Right, wood beam, light two horse, making furrow 4½ to 6½ inches deep and 10 to 12 inches wide. $16.40.

No. 602 Right, and No. 502 Left. Wood beam, medium, two horse, making furrow 5 to 7 inches deep and 11 to 14 inches Wide. $19.60.

No. 601 Right, and No. 501 Left. Wood beam, heavy, two horse or light three horse, making furrow 5½ to 8 inches deep and 12 to 16 inches wide. $20.60.

Two-Horse Plows—Steel Beam

No. 1462 Right and No. 1362 Left. Steel beam, similar to No. 602 wood beam plow. $19.60.

No. 1461 Right and No. 1361 Left. Steel beam, making furrow 5 to 8 inches deep and 12 to 16 inches wide. $20.60.

SYRACUSE REPAIRS

	Mould-boards	Land-sides	Solid Shares
50	$1.87	$0.63	$0.35
53	3.00	.93	.48
603	3.15	1.30	.65
602	5.00	1.38	.65
601	5.50	1.38	.70
1462	3.45	1.02	.65
1461	3.80	1.02	.70

OLIVER PLOWS AND REPAIRS

	Plows	Mould-boards	Land-sides	Solid Shares
A	$11.25	$1.60	$0.55	$0.28
B	13.50	2.05	.75	.37
10	16.00	2.25	.80	.42
13	18.00	3.00	.95	.51
19	19.00	3.25	1.00	.55
20	21.00	3.40	1.05	.60
E	24.00	3.75	1.10	.70
40	23.50	3.75	1.10	.70

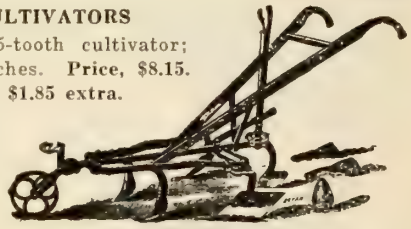
SHOVEL PLOWS

Steel beam, single shovel. Price, $5.50.

Steel beam, double shovel. Price, $6.60.

Steel beam, triple shovel. Price, $8.40.

IRON AGE CULTIVATORS



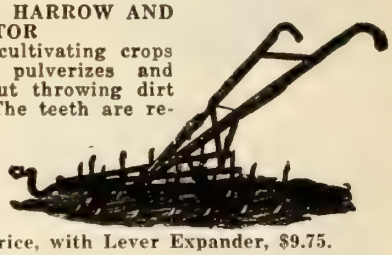
No. 605. Plain 5-tooth cultivator; expands 9 to 24 inches. Price, $8.15. Lever Expander, $1.85 extra.

No. 800L. Cultivator and horse hoe combined, as illustrated. Price, $14.90.

WHITE'S PLAIN 5-TOOTH BENT FRAME CULTIVATOR

$5.00.

IRON AGE COMBINED HARROW AND CULTIVATOR



A splendid tool for cultivating crops in rows; thoroughly pulverizes and loosens the soil without throwing dirt on the small plants. The teeth are reversible and can be changed in 4 different positions. Expands 11 inches to 36 inches. No. 4014. Price as shown in illustration, $8.50. Price, with Lever Expander, $9.75.

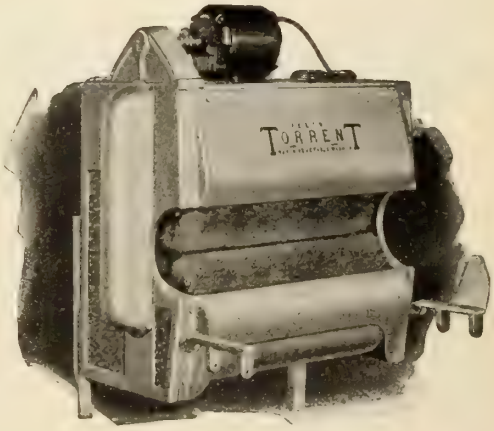
Save Hours of Labor with These Machines.

FELINS VEGETABLE TYING MACHINE

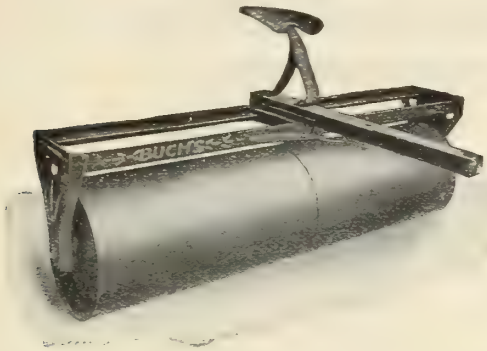
Bigger and Better Than Ever.
$65.00

BUNCH VEGETABLE WASHER

Washes 200 Dozen Bunches An Hour. Increase Your Profits.
$140.00



STEEL LAND ROLLERS

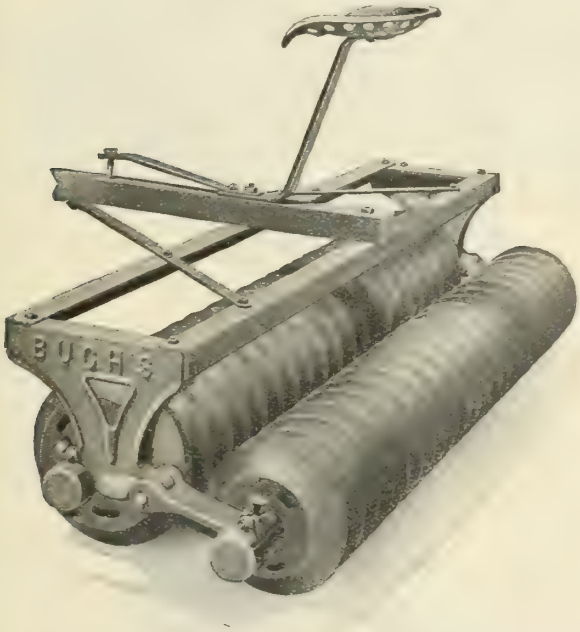


Drums of Heavy Tank Steel. Angle Steel Tops—Angles 3x3x5/16 inches—Extra Strong. Axles—1⅝-inch Round Steel. Closed Pressed Steel Heads. Hardwood Boxings—Acknowledged by all to be the best. Tractor or Horse Hitch.

No. 102½—8 ft., 2 sec., 26 in. diameter; 550 lbs. $40.00
No. 103½—8 ft., 3 sec., 26 in. diameter; 600 lbs. 42.75
No. 105½—8 ft., 2 sec., 24 in. diameter; 510 lbs. 37.50
No. 106½—8 ft., 3 sec., 24 in. diameter; 535 lbs. 40.00
No. 120½—9 ft., 3 sec., 24 in. diameter; 585 lbs. 42.25
No. 118½—4⅔ ft., 2 sec., 24 in. diameter; 370 lbs. 36.75

Extra for Eveners, $2.35.

BUCH'S SOIL PULVERIZER



Simple in construction. Strong rigid frame. Angles—2½x3x5/16 inches with Heavy Cast Hangers, 1⅝-inch Axle. Inclosed Dust-Proof Wood Bearings with Hard Oil Cups.

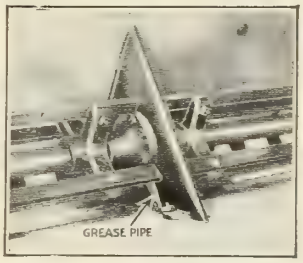
Solid one-piece Discs 4-inch face, 15-inch front, 12-inch rear. Pulverizer so constructed that Discs must alternate and impossible to get out of alignment. End Discs closed to keep out stones and dirt.

With our Trailer Arm, both front and rear Gang work independent. No division of weight, both front and rear gang pulverizing the soil under all conditions in uneven ground. This feature makes our pulverizer light in draft.

No.	Length	Rolling Capacity	Weight	Price
625	6 ft.	62 inch	800	$58.75
626	7 ft.	74 inch	900	62.75
627	8 ft.	84 inch	1000	67.00
628	9 ft.	98 inch	1100	73.25
630	11 ft.	122 inch	1350	92.00

Foretruck, $8.50; Eveners, $2.35; Tractor Hitch in addition to Pole and Seat, Extra $2.75.

"SO-RITE" UNIVERSAL FERTILIZER AND LIME SOWERS



Interior View of Hopper

Bottom View of Outlet

No Belts to Replace

As a Fertilizer Drill—Rubber spouts are attachable to any desired points three inches apart under the entire machine; adjustable, of course, to any width rows. Used as a 2-row, 3-row, or 4-row machine remove by hand—no tools necessary—stoppers and insert spouts where desired, closing the outlets from where the spouts came with the stoppers, which were taken out. The quantity to be sowed is obtained by adjustment of lever on back of machine, which lever opens and closes the outlets.

As a Broadcaster—Remove all stoppers, spouts and the broadcast of this So-Rite machine is perfect.

Note—Grease cup in rear feeds grease to center bearings. Stoppers and spouts are held in place by copper clips which will not rust. Feed is regular and positive. All parts strongly and simply made. Wheels are adjustable.

Specifications:
Wheels—36 in. high.
Tires—3 in. wide.
Axle—1¼ in. C. R. Steel.
Hopper—⅞ in. Yellow Pine.
Bearings, Outer—Solid Oak (oil-soaked).
Bearings, Center—Cast Iron (with grease cup).
Capacity Hopper—400 to 700 lbs.
Capacity Acre—300 to 5,000 lbs.

Width	No. Spouts	Weight	Price
3 ft. 1-Horse	6	225 lbs.	$36.00
6 ft. 1-Horse	9	325 lbs.	50.00
7 ft. 1-Horse	9	350 lbs.	54.00
8 ft. 1-Horse	9	375 lbs.	58.00
9 ft. 2-Horse	9	400 lbs.	62.00
10 ft. 2-Horse	9	425 lbs.	66.00

Extra Spouts Complete 75c each.

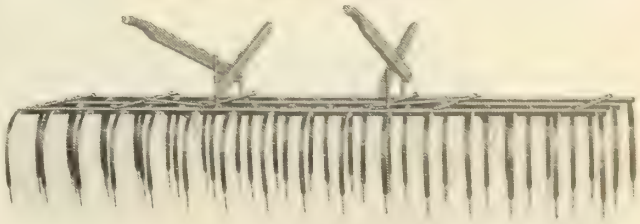
DRAG SCOOPS

No. 1, $7.75 No. 2, $7.50 No. 3, $7.25

SINGLE AND DOUBLE TREES

Single, 2 hooks, 26 in. 55c; 28 in. 60c.
Single, 3 hooks, 26 in. 60c; 28 in. 65c.
Double, 36 inch $1.00; 40 inch $1.25.

FLAT TOOTH WEEDERS

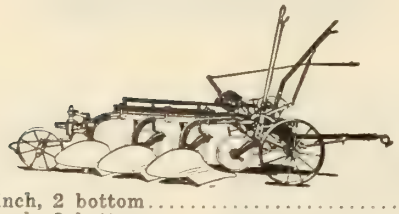


7½-foot Flat-Tooth Weeder $12.00

CASE QUALITY FARM MACHINERY

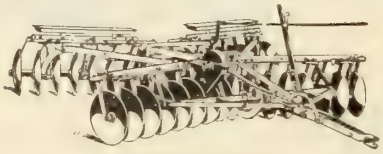
WRITE FOR SPECIAL FOLDER ON IMPLEMENTS YOU MAY NEED

TRACTOR PLOWS



B22BX-12 inch, 2 bottom $116.35
B24BX-14 inch, 2 bottom 118.45

POWER CONTROL DISK HARROWS



Double Cut

No. 76, 6 ft., 24 16-inch disks $121.55
No. 77, 7 ft., 28 16-inch disks 128.80
No. 78, 7 ft., 28 18-inch disks 139.55

Single Cut

No. 78S, 8 ft., 16 16-inch disks $79.25

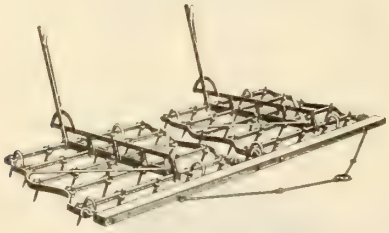
HORSE DRAWN DISK HARROWS

8 Disk, 16 inches, 4 feet, 2-horse evener and pole $58.65
10 Disk, 16 inches 62.00
12 Disk, 16 inches 67.00

TONGUE TRUCK FOR DEEP DISK HARROW

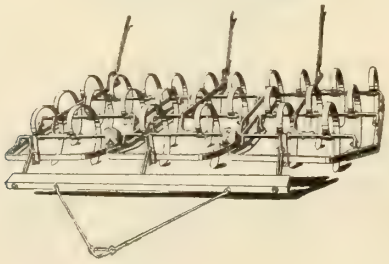
The Harrow Truck is a new device and enables the user to make a short turn and relieves the neck weight entirely. $11.00.

SPIKE TOOTH HARROWS



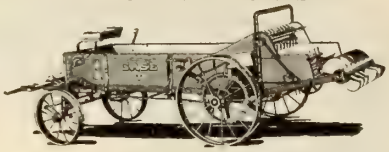
One horse, one section, 4 ft. cut, 25 tooth, no drawbar .. $ 8.85
Two horse, two sections, 8 ft. cut, 50 tooth, with drawbar 20.50
Two horse, two sections, 10 ft. cut, 60 tooth, with drawbar 23.00

SPRING TOOTH HARROWS



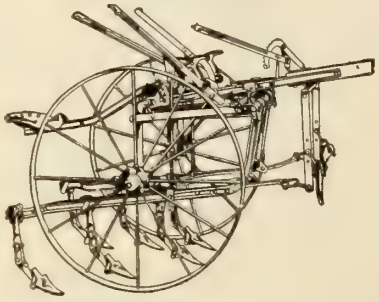
15 tooth, 2 sections, cuts 57 inches $24.85
17 tooth, 2 sections, cuts 64 inches 26.50
23 tooth, 3 sections, cuts 92 inches 37.25

MANURE SPREADERS



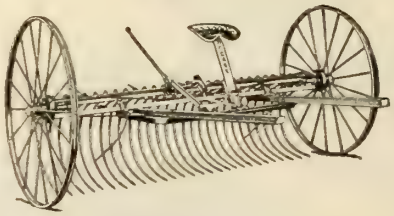
No. 3 with two horse evener $171.85

ONE ROW CULTIVATORS



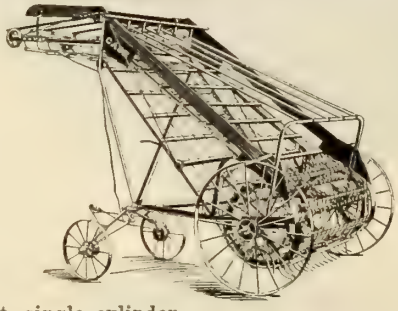
K-P26, 6 shovels, pin break $60.65
K-P28, 8 shovels, pin break 61.95
K-R198, 8 shovels, spring trip 70.00

DUMP RAKES



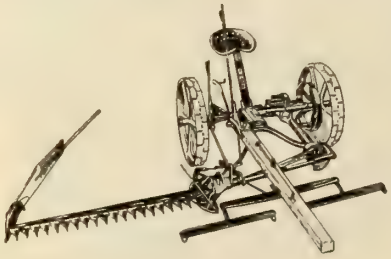
No. 923, 9 ft., 23 teeth (469 lbs.) $49.50
No. 1232, 12 ft., 32 teeth 58.25

CYLINDER HAY LOADERS



No. 16, 6 ft. single cylinder $125.25
No. 164, 6 ft. double cylinder 137.65

MOWERS



No. 55, 5 ft. cut, plain lift, final drive gears running in oil $95.10

FARM AND GARDEN TRACTORS

Start with a GRAVELY End with a Profit!

Your Profits Must Increase—

Proportionally as you reduce the cost of producing your crops. Market prices of your products cannot be controlled, but by discarding obsolete methods and adopting modern equipment, costs are greatly reduced. This is exactly what Gravely Tractors do. They reduce the cost of production thereby increasing your profit.

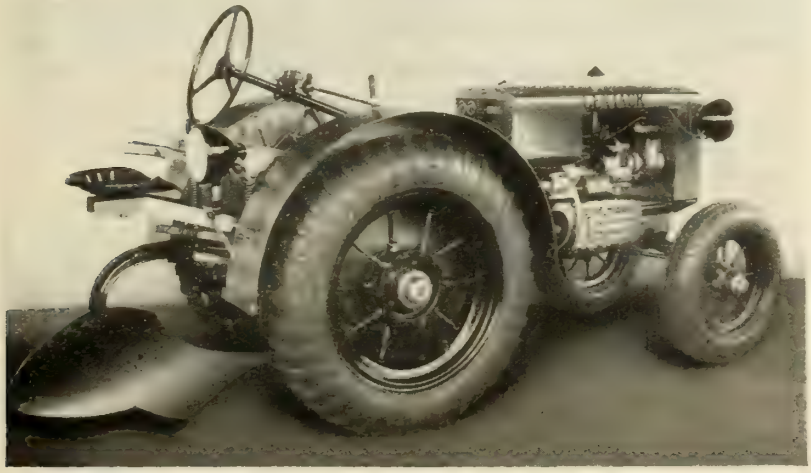
As Illustrated, $250.00

THE GRAVELY MOTOR CULTIVATOR

Designed for vegetable growers.
Does excellent work quickly.
Operates at low cost.
Is constructed of very best material.
Works in rows 8 in. to 3 ft.
Works with Planet Jr. Equipment.
All working parts protected from dirt.
Powerful Air-Cooled Motor.
Patented single wheel, gives positive traction, easy control and accurate work.
Easily operated by inexperienced help.

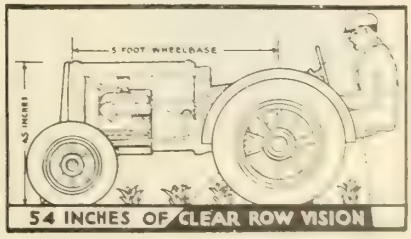
CENTAUR

You must see and drive the Centaur to fully realize its power and ability to perform easily and economically. The ideal tractor to eliminate all horse power on your farm. Centaur's low over-all height, short-turning radius of 9 feet outside makes it an ideal Orchard Tractor. Because of its ease of control, excess power and low maintenance cost. Farmers, Orchardists, Florists, Nurserymen, Golf Courses, Estates, etc., are using the Centaur in preference to larger and more expensive tractors.



MODEL "KV"

1. 22 horse power.
2. One 14" Plow or two 10" or 12" Plows.
3. 45" over-all width.
4. 16" row clearance.
5. 9 ft. outside turning radius.
6. Four speeds ahead up to 20 miles per hour
7. Operates on about ¾ of a gallon of gasoline an hour.
8. Centaur Tractors priced from $515.00 to $795.00.
9. Send for literature.
10. This row vision is what counts.



See the Gravely or Centaur demonstrated just as soon as possible. Write or phone today for an appointment.

BLOOD TESTED FOR B. W. D. BY ANTIGEN METHOD

MANNS' Quality-Bred CHICKS

WE GUARANTEE DELIVERY

100% LIVE VIGOROUS CHICKS

With Profit Producing Characteristics Bred Into Them

They are hatched from eggs of free-range stock and inherit the physical perfection made possible only by an abundance of sunshine, fresh air and exercise.

Place your order with us for your season's supply of Day-Old Chicks, and you will have taken the first step toward a very profitable poultry year.

MAIL ORDERS

It is very important that you let us have your order as early as possible. Just as soon as you have read this page is the very best time. You can in this way specify a definite delivery date and we can serve you direct from the hatchery with strong chicks full of vitality. Should there be a decline in the market price of chicks, we will make an adjustment to equal the reduction.

Customers not having charge accounts with us are requested to send at least one-fourth of the price when placing orders; remittance for balance to reach us before shipment is made. No chicks sent C.O.D. No orders accepted for less than 25 chicks of any one variety.

DELIVERIES

Chicks are forwarded postpaid and brief instructions are sent with each order, suggesting best methods of care and feeding. Be prepared; see that hovers are in good condition, and have a ready supply of grit, charcoal and Buttermilk Starting Feed.

Please Note—Inspect chicks immediately upon arrival. If full count live chicks are not received, have postman sign a statement showing number dead, mail this to us and a satisfactory adjustment will be made.

Barred Plymouth Rock

BARRED PLYMOUTH ROCKS

First distinctively American breed and still the most popular of the all-purpose breeds. Barred Rocks are hardy and vigorous; excellent winter layers, and also preferred by experienced buyers of table fowl because of their abundant breast meat and bright yellow skin. Easy to raise and will thrive anywhere.

BUFF ORPINGTONS

A choice table bird—either as broiler or roaster. They develop rapidly, eight-week-old cockerels often weighing two pounds. They are excellent winter layers, stately in appearance, with long, round deep bodies, full breasts and broad backs.

JERSEY BLACK GIANTS

This new breed is becoming more popular every year. The plumage is lustrous greenish black, skin a rich yellow, finest table fowl, extremely large and heavy; excellent layers of large brown eggs.

White Leghorn

WHITE LEGHORNS

Most widely used breed of chickens, being the best of all for egg production.

The strain which we offer are bred to suit the requirements of commercial egg farms and every possible means has been employed in developing the stock for this purpose.

WHITE WYANDOTTES

One of the oldest and most popular of all American breeds, and ranking among the highest as egg producers. They have broad backs, deep round bodies, large red rose combs, yellow skin, and heavy close fitting plumage which enables them to withstand cold weather. Very striking in appearance; unsurpassed for table fowl.

White Wyandotte

Rhode Island Red

RHODE ISLAND RED

One of the best layers of the heavy breeds and an excellent table fowl. Somewhat rangier than Plymouth Rocks but the strongest competitor. A very profitable breed for the farmer. They are universally popular, however, with all poultrymen.

WHITE ROCKS

Differ from Barred Rocks only in their plumage. Quiet and easily confined. Popular because of their beauty, productiveness and value for market purposes; they dress easily having no dark pin feathers. Notable layers of large brown eggs.

PRICES

Jersey Black Giants
Jersey White Giants
New Hampshire Reds
Red Rock Cross

$10.00 Per 100

Barred Rocks
Buff Orpingtons
Rhode Island Reds
White Leghorns (Large)
White Rocks
White Wyandottes

[$9.50 Per 100]

Less than 100 lots add 1c each.

Order Early—You will be given full benefit of any reduction in prices until shipping date.

FOR ECONOMY

Give Your Chicks The Best

FEED THEM

Conkeys

(The Original)

Conkeys Buttermilk Starting Feed with Y-O

Feed it to your chicks for the first six weeks. Contains every element necessary for baby chick life, health and development. Combine it with your Chick Grains. **5 lbs., 30c; 10 lbs., 50c; 25 lbs., $1.10; 50 lbs., $2.10; 100 lbs., $3.95.**

Conkeys Gecco Growing Mash with Y-O

For your growing birds from six weeks to maturity. **10 lbs., 50c; 25 lbs., $1.10; 50 lbs., $2.00; 100 lbs., $3.65.**

Conkeys Red Seal Growing Mash

With Cod Liver Oil, 100 lbs., $3.35.

Conkeys Gecco Egg Mash with Y-O

Feed this mash to make your hens lay every egg possible. Contains just the right amount of animal protein, minerals, vitamins, etc., for economical egg production. **10 lbs., 45c; 25 lbs., $1.05; 50 lbs., $1.90; 100 lbs., $3.50.**

Conkeys Red Seal Laying Mash 100 lbs., $3.25

Conkeys Gecco Chick Grains 100 lbs., $3.25

Conkeys Gecco Growing Grains

Ties up splendidly with your Growing Mash. **100 lbs., $3.15.**

Conkeys Gecco Scratch Grains 100 lbs., $3.00

Superior Scratch Grains 100 lbs., $2.85

Clean, Wholesome Cracked Corn 100 lbs., $2.75

Conkeys Balanced Rabbit Feed with Y-O

10 lbs., 45c; 25 lbs., $1.05; 50 lbs., $1.90; 100 lbs., $3.55.

Conkeys Pigeon Feed-Breeders Without Corn

10 lbs., 50c; 25 lbs., $1.10; 100 lbs., $3.95.

Conkeys Y-O

1 lb., 50c; 2 lbs., 90c; 5 lbs., $1.60; 25 lbs., $5.45; 100 lbs., $16.50.

Be Prepared

Keep A "Conkey Corner" In Your Poultry House

Conkeys Old Reliable Powder, Dia-Tabs, Nox-i-cide and Poultry Tonic are especially helpful at this season.

AVICOL

For White Diarrhea Stops Chicks Dying

Avicol is positively guaranteed for both prevention and treatment. Easy to give. Simply drop it in the drinking water. It will pay you to give Avicol to all your chicks this year, and keep them healthy and free from disease. **Prices: 50c and $1.00.**

"T. S. F."

Kills Chicken Lice On Both Young and Old

This is the method endorsed by the U. S. Department of Agriculture for killing all poultry lice. It never fails to do the work. **Three sizes, 35c; 60c and $2.50.** (If by mail, add 10c for postage and packing.)

DON SUNG

Makes HENS LAY GUARANTEED

A wonderful tonic that acts directly on the egg-laying organs and is beneficial in every way. Makes chickens healthy, keeps them developing, and gets the eggs. **Prices: 50c, $1.00 and $5.00.**

The sure way to treat Colds, Roup and Canker. Used and endorsed by leading poultrymen everywhere. **Prices: 50c and $1.00.**

Group-Over

GERMOZONE

Keeps Chickens Healthy

Germozone three times a week in the drink destroys disease germs taken in with the food or water. Keeps the crop pure and sweet. Corrects and prevents diarrhea and bowel troubles, also recommended for Roup, Colds, Canker, Swelled Head, etc. **Prices: 12-oz. bottle, 75c; 32-oz. bottle, $1.50; ½ gal., $2.50; gal., $4.50.**

A Triple Combination Worm Medicine containing Kamala (for Tape Worms), Nicotine Sulphate (for Round Worms) and Pyrethrum (for Pin Worms), all in an Insoluble Capsule.

Being Insoluble it therefore carries through to the gizzard. In the gizzard it is ground up, pouring the correct dose in full strength directly into the intestines upon the worms.

	50	100	250	500	1000
Adult	$0.75	$1.35	$3.00	$5.50	$10.00
Pullet	.50	1.00	2.50	4.50	8.50
Chick	.40	.75	1.75	3.25	6.00

Vapo-Spray

Is the most effective medicine for colds, coughs, flu and pneumonia. With the first cough, treat the entire flock. **1 qt., 75c; ½ gal., $1.25; 1 gal., $2.00.**

Leemulsion

An effective companion of Vapo-Spray is given in wet mash or soaked oats and acts exactly as a cough medicine does on humans. **12 oz., $1.00; 32 oz., $2.00; ½ gal., $3.50.**

Toxite

Disease Control Spray — Controls poultry Coccidiosis, Round Worms and Red Mites which are transmitted by contaminated litter. **$1.50 per gal.; 30 gallon drum, $1.30 gallon; 55 gallon drum, $1.20 gallon.**

STAR FOUNTAIN AND FEEDER

Made of a single piece of rust-resisting metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks cannot drown. Fits any Mason jar in 1-Pint, 1-Quart and 2-Quart sizes.

(Glass jar not included)

No. 32—Each ..... $ .10
No. 144—Tin plate, each ..... .10
No. 151—Crystal, each ..... .10

ROUND CHICK FEEDERS

Each
No. 11—Diam. 6 in., with 8 holes.. $ .10
No. 12—Diam. 8 in., with 12 holes. .20

REEL TOP FEEDERS

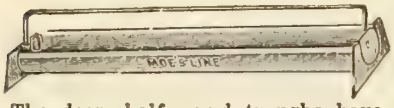
Chick Feeder, 4 adjustments, galv. iron, adjustable legs.

No. 466S—Length 24 inches, each.. $ .55
No. 467S—Length 36 inches, each.. .70
No. 468S—Length 48 inches, each.. .90

Broiler Feeder, 3 adjustments, galv. iron, adjustable legs.

No. 257S—Length 36 inches, each.. $1.15
No. 258S—Length 48 inches, each.. 1.40

DIXIE CHICK FEEDERS



The deep, half-round troughs have a turned-in flange to prevent waste. Easy to fill and clean.

The wire top guard keeps the chicks out, and is adjustable, so it can be raised as the chicks grow in size.

Galvanized Steel

No. 460—Length 18 inches, each.... $ .20
No. 462—Length 30 inches, each.... .25

GRILL TOP CHICK FEEDER

Has a hinged wire roost proof grill, galv. steel trough 4¼ in. wide by 2¼ in. deep with turned in edges to prevent waste. Adjustable legs.

Each
No. 310S—Length 24 inches..... $ .60
No. 311S—Length 36 inches..... .80
No. 312S—Length 48 inches, each.. 1.00

BROILER FEEDER

No. 250S—Length 36 inches, each.. $1.15
No. 251S—Length 48 inches, each.. 1.45

MOE'S BIG BOY FEEDERS

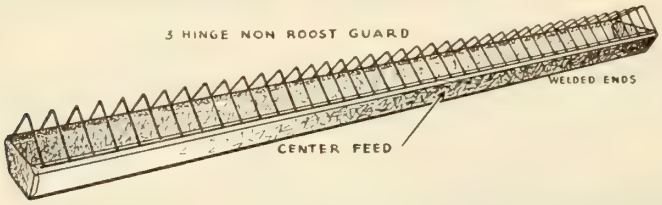
Can be placed on the ground or suspended by wire handles. Length 33 inches, with 34 feeder openings.

Each
No. 160—Without the wide covers.. $2.00

DRY MASH HOPPERS

A strictly high quality hopper, properly designed. The curved bottom keeps the feed in easy reach, and the taper shape of the hopper prevents the feed from clogging. Height 19 inches.

Each
No. 35—Width 8½ inches .... $ .75
No. 36—Width 12 inches 1.25
No. 13—Width 18 inches..... 1.40
No. 37—Width 24 inches..... 1.50



CHICK FEEDERS AND WATERERS

F2-G—Designed for day old chicks to eight weeks. 4 inches wide, 2 inches high, 28 inches long, weight 2 lbs. 35c each.

F2—Tumble guard not only adjustable but tilts out of the way without removing for easy cleaning and filling. 4 inches wide, 1½ inches high, 28 inches long, weight 1½ lbs. 25c each.

GROWING FEEDERS

Model	Length	Grid Spacing	Price
F-3	30 in.	1-5/8 in.	$ .85
F-4	48 in.	1-5/8 in.	1.35
F-4-D	48 in.	2-1/2 in.	1.50
F-4-H	48 in.	2-1/2 in.	1.35

GRIT BOXES

Economical and practical for feeding grit, shells, etc.

Thoroughly well made, no solder used in their construction.

Each
No. 9—3 Compartments..... $ .75
No. 90—4 Compartments..... .90

DROP BOTTOM FOUNTAINS

Drop Bottom, easy to fill and to clean. Has wire handle and may be hung on the wall out of the litter and dirt.

No. 41—Galvanized, 1 gallon, each.. $1.00
No. 136—Tin, Buttermilk Feeder, 1 gallon, each..... 1.50

ALUMINUM LEG BANDS

No. 130—Aluminum, with raised numbers.

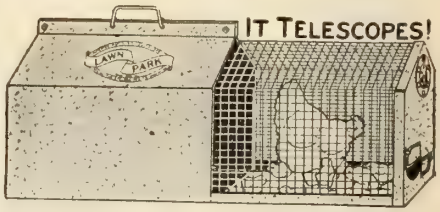
Pkg. of	12	25	50	100	500	1,000
Price	$ .15	$ .20	$ .35	$ .60	$2.75	$5.00

SPIRAL BANDS

Best quality. Made in six sizes and ten colors. Sizes: Asiatic, American, Mediterranean, Bantam. 25 bands, 25c; 50 bands, 40c; 100 bands, 75c.

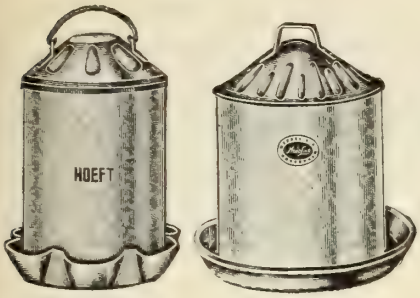
Baby Chick and Pigeon. 50 bands, 20c; 100 bands, 35c.

"LAWN PARK" BROOD COOP



Size when extended, 18 inches wide, 19½ inches high, and 48 inches long. Not Mailable. Price, $3.00.

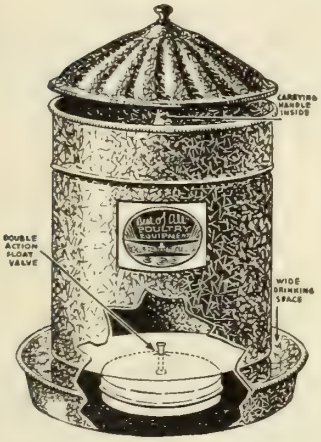
FOUNTAINS



No. 159 No. 268

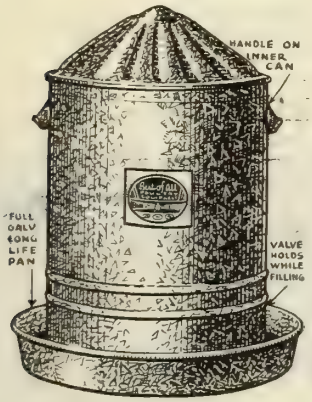
No. 158—1 gal. $.55 No. 268—1½ gal. $1.20
No. 159—2 gal. .75 No. 269—3 gal. 1.85
No. 270—5 gal. 2.20
W2—4 qt. .... .50 W3—8 qt. ..... .80

FLOAT FOUNTAINS



No. W14—5 gal. $2.25
No. W15—8 gal. 3.25

TOP FILL FOUNTAINS



No. W22—2 gal. $1.25
No. W23—3 gal. 1.65
No. W25—5 gal. 2.25
No. W28—8 gal. 3.40

RED CHIEF HAND CORN SHELLER

Clamps on barrel or box; has patented oval-shaped teeth, shelling the corn without cracking the grains. It shells very easily and throws out the cob every time. Price, $2.00.

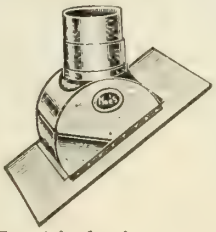
AUTOMATIC FOUNTAIN

Each
No. 30—Automatic Valve and Float only ..... $ .85
No. 31—Water Pan only. Heavy galvanized iron. ..... .50
No. 31A—Automatic Valve and Pan complete 1.50

FOUNTAIN AND BROODER HEATER

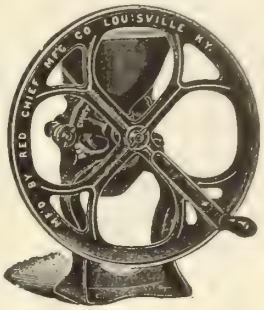
Can be used with all styles of fountains, and effectively prevents water from freezing. It is also an excellent heater for small brooders.
No. 10—Each $1.75

ADJUSTABLE ROOF SADDLE



No. 440—For 4-inch pipe $1.35
No. 441—For 5-inch pipe 1.45

RED CHIEF RAPID GRINDING MILL



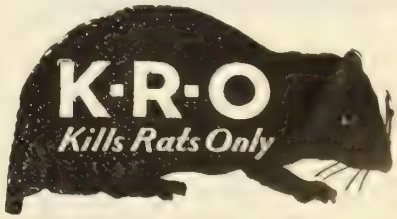
It is built on scientific lines and combines all the elements which make up the most satisfactory Hand-Power Mill for grinding small grain. The burrs are extra hardened and self-sharpening; they cut; do not smash.

No. 2—Is operated by a crank; chains or bolts to a box as desired. Has hooks on which to hang a bucket. Capacity 1 to 2 bushels per hour. Price, $5.00.

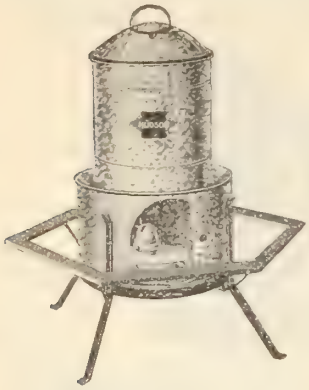
No. 5—Has a fly wheel which makes the Mill run steady. and requires the least possible power to turn it. It fastens by chains or bolts. Capacity 2 to 4 bushels per hour. Price, $6.50.

No. 10—This Mill has beautiful outlines, as shown in illustration; will grind any kind of small grain; also oyster shells and dry bone. Capacity 2 to 4 bushels per hour. Price, $8.50.

No. 20—Combined Hand-Power Mill. It is substantially constructed; all bearings bronze metal, and when run a speed of from 300 to 450 revolutions per minute will grind from 10 to 20 bushels per hour. Power required, from 1½ to 2 horse-power engine. Price, $19.00.



Not a poison, will not kill livestock, dogs, cats or poultry.
Price, 75c.



Poultry Waterer

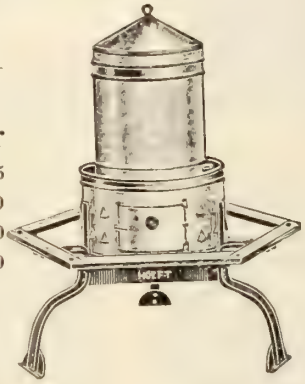
Eight gallon capacity, Kerosene or Electric Heated, with perch and legs.

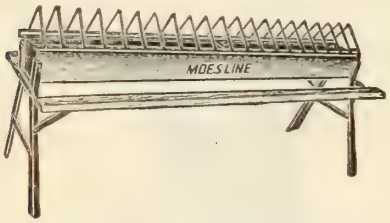
No. L8HB—With single burner flueless lamp, weight 31 pounds. **Price, $8.95 each.**

No. L8EB—Base insulated and ready to receive electric light socket, weight 32 pounds. **Price, $9.95 each.**

Fountain and Heater

No. 424—3 gal.	$3.35
No. 425—5 gal.	3.70
No. 424S—With Stand	5.20
No. 425S—With Stand	5.50





Flock Feeder

No. 373—Length 3 ft. with stand $2.95

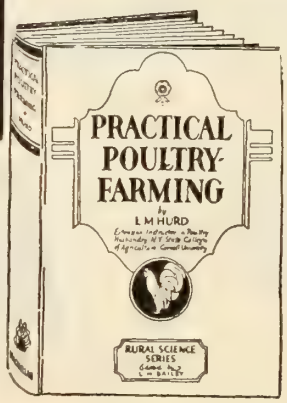
No. 375—Length 5 ft. with stand 4.20

No. 378—Length 8 ft. with stand 5.95

STONEWARE FOUNTAIN

½ gal., 35c; 1 gal., 50c; 2 gal., 85c.

(Not mailable.)



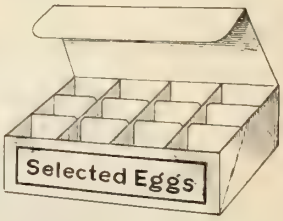
PRACTICAL POULTRY FARMING, by L. M. Hurd. Here are practical, useful, and money-making ideas on raising poultry for profit. Complete in every detail. The only book which tells the vitamin content of poultry feeds. 149 illustrations, 405 pages. $2.50.

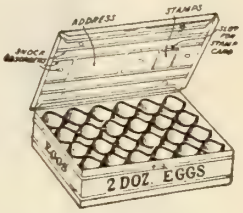
Poultry and Produce Scale

No. 83—Used by grocers, butchers, fruit dealers, etc. Also a reliable scale for use in the home, giving an accurate check on household purchases and supplies. Capacity 20 pounds by ounces; heavy steel throughout, equipped with a special tempered Hanson spring and gravity rack, adjusted by set screw at top, 6½-inch dial, 28-gauge steel; figures in black on white enamel. Finish Black Japan and decorated in gold. Has a heavy prime galvanized machine-made scoop and chains. Height overall 28½ inches. Scoop size 18 by 14 inches. (Weight 5 pounds.) **Price, $2.75.**

Egg Cartons

These pasteboard egg cartons are just the thing for safely and quickly packing eggs in one dozen lots for delivery to your retail customers. The appearance and convenience of the package will increase your sales. **12c doz.; $1.00 per 125; $1.75 per carton of 250** (weight 27 pounds). Postage extra.





Metal Egg Crates

For Selling Eggs By Mail

Indestructible; pays for itself in a few shipments; lasts years; makes interchangeable shipping easy. Buy yours now and realize more money for your eggs. Your friends want them.

The Metal Edge Filler is a wonder. A new invention and cannot be beat for safely carrying Eggs by mail. Light in weight but strong.

Write us about Butter-Egg Crates

1-dozen size	$1.00	6-dozen size	$2.00
2-dozen size	1.25	9-dozen size	2.50
3-dozen size	1.50	12-dozen size	3.00
4-dozen size	1.75	15-dozen size	3.50

Postage Extra.

WATER GLASS

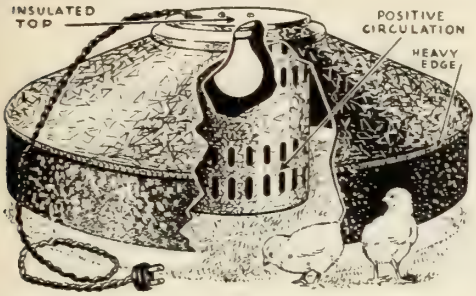
Used especially as an egg preservative. Mix 1 part with 9 parts of water. **1 qt., 30c; 1 gal. $1.00.**

CEL-O-GLASS—VIO-RAY

Now guaranteed for 5 years. Unbreakable weather proof, transmits violet rays (Glass does not). Ideal for poultry house, fronts, windows and doors, and many other uses. **Standard Roll, 36 inches wide, 100 feet long, 38c per running foot.**

VIO - RAY WINDOW FABRIC

Scientifically processed white cloth, thin enough to admit violet rays, and yet strong enough for all weather. **Sq. yd., 23c; 10 sq. yds. or more, 20c.**



C-1 FLOOR BROODER

For the progressive small flock raiser who knows the advantages of electricity.

C-1 is fitted with socket for light bulb, 6 ft. of cord and curtain. (Bulb not furnished.)

C-1—22 in. diameter, bulb heated, 75-100 chicks, 8 lbs., price..... $2.50

WAFER THERMOSTATS

Three inch double brass wafers filled with a special compound to operate on low brooding temperatures as well as in incubators. Stop your loss this year. Do not use old wafers. Give your brooders and incubators a fair chance. Order new wafers now. Specify plain or screw stud. 25c each.

LITTLE PUTNAM STOVE, each $1.80
PUTNAM BROODER STOVES.....$4.25

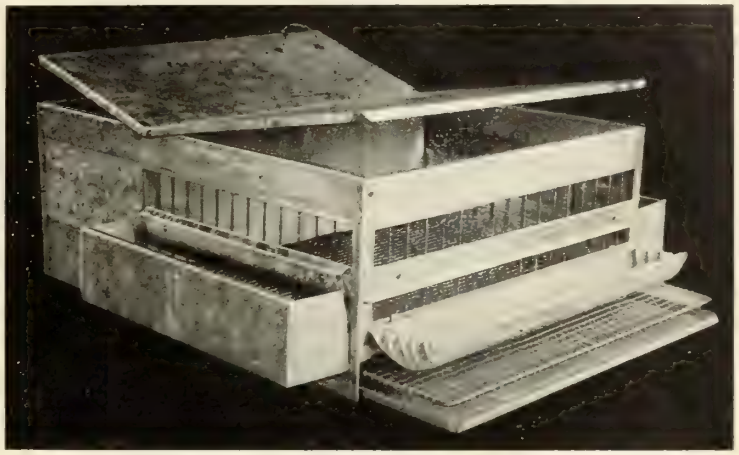
OAKES HOT WATER INCUBATOR

No. D-98— 60-egg capacity, weight 25 lbs... $7.50
No. D-99—100-egg capacity, weight 40 lbs.... 10.00

ELECTRIC CANOPY BROODER

B-13—A steep pitch canopy which prevents roosting, ventilator furnishes a continuous circulation of air without drafts. Made of 26 gauge galvanized; heavy curtains, adjustable legs, has two independent heating circuits of 500 watts each—1,000 watts. Wired for 110 volts, can also be wired for 220 volts. Capacity 500 chicks, size 50 in. by 50 in., weight 75 lbs.....$21.75

B-9—30 in. diameter, elec. automatic heat...$7.45



B-1 Junior Battery

B-1 JUNIOR BATTERY

(As Illustrated at Right)

A new box brooder giving all the wonderful results and low labor cost of the Battery system. Designed for the raiser of small flocks. So successful that it is being adopted by many big operators. Note the open sides and ample ventilation. Chicks will not develop rapidly in a closed tight brooder. This Brooder has a 150 Watt "Beacon cement coated" heating element controlled by a quick make and break non-radio interfering Thermostat, the finest tinned floors you ever saw.

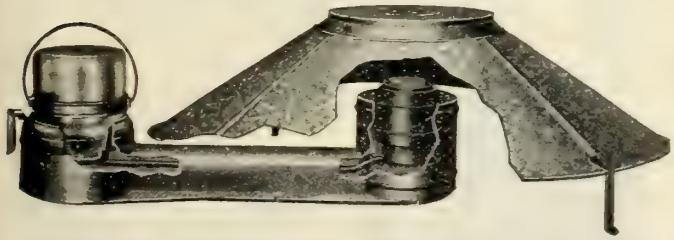
Dimensions: 24x30 inches. Capacity, 80 day-old chicks. Weight, cartoned, 26 pounds. $8.95.

B2—20x24 inch, bulb heated, with feed and water pans, $4.50.

ELECTRIC BROODERS

56-in., 375-chick	$14.00
65-in., 550-chick	17.50

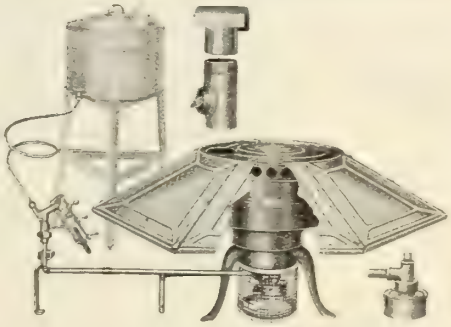
AUTOMATIC OIL BROODER



Brazed Oil Assembly. Wire Edged Canopy. Attractive Steel Shell, Thermostat Control. Unexcelled Wickless Blue Flame Burner. Entire Simplicity.

42-in. Canopy—Capacity 250 chicks, weight 44 pounds..$11.00
52-in. Canopy—Capacity 500 chicks, weight 52 pounds.. 12.00

HUDSON OIL BROODERS



No. 254D—Completely enclosed in a 54-inch Hexagon-shaped Hover. Drum 22 inches in diameter, 8 inches deep. Combustion chamber 9 inches in diameter, 10½ inches long, 18-gauge. Over-all height 24½ inches. 8-gallon fuel tank. Recommended for houses up to 14x14 for 500 to 1,000 chicks. Without Fuel Stand. $18.75.

No. TS3—Fuel Stand, 95c.

No. 366D—With 66-inch Hexagon-shaped Hover. Recommended for houses up to 14x16 feet for 750 to 1,500 chicks. Without Fuel Stand. $23.95.

COAL BURNING BROODERS

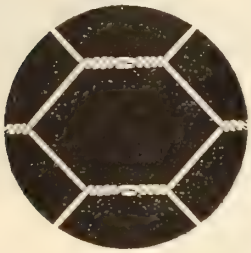
MOES	500 chicks	1000 chicks	1200 chicks
Diameter of Hover.....	42 in.	52 in.	56 in.
Price.....	$14.45	$17.90	$20.00

BUCKEYE COAL BROODERS

No. 36—42 in. Dandy..... $9.70

POULTRY NETTING

GALVANIZED AFTER WEAVING 150-FOOT ROLLS



Hex-Cel

Straight Line

2-inch Mesh

	19 gauge	20 gauge
12-inch	$1.05	$0.95
24-inch	1.95	1.70
36-inch	2.65	2.30
48-inch	3.50	3.10
60-inch	4.40	3.85
72-inch	5.25	4.60

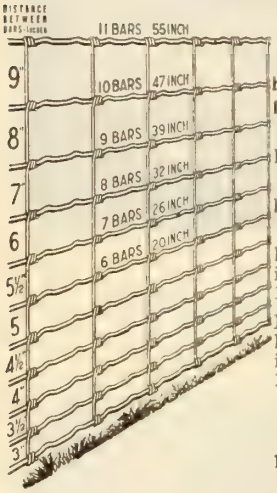
1-inch Mesh

	20 gauge
12-inch	$1.95
18-inch	2.85
24-inch	3.60
30-inch	4.55
36-inch	5.30
48-inch	6.90

25 to 150 foot lengths.

2-inch mesh 1c per sq. ft.

1-inch mesh 2c per sq. ft.



AMERICAN FARM FENCE

Thoroughly galvanized, with hinge joint patent lock knot. Let us send descriptive folder.

No. 635—6 strands, 35 inches high, 12-inch stays, per rod, 25c.

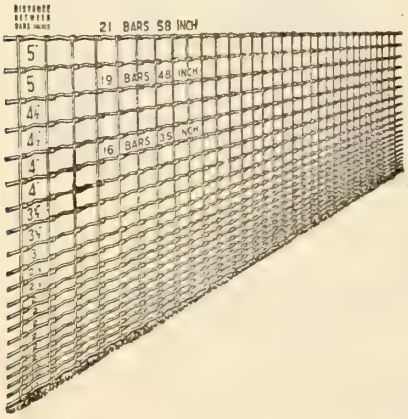
No. 845—8 strands, 45 inches high, 12-inch stays, per rod, 35c.

No. 832—8 strands, 32 inches high, top and bottom wires No. 9, intermediate and stay wires No. 11, 6-inch stays, 55c.

No. 1047—10 strands, 47 inches high, top and bottom wires No. 9, intermediate and stay wires No. 11, 12-inch stays, per rod, 50c.

Put up regular in 20-rod Rolls. Prices subject to change. 10-Rod Rolls, 25c per Roll Extra.

PIONEER POULTRY FENCE



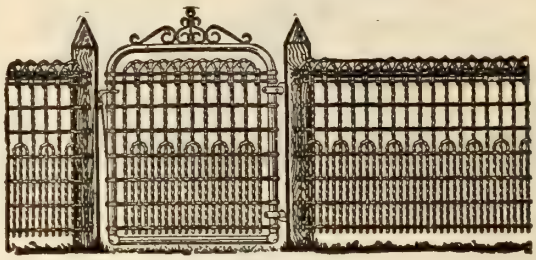
No. 1948—48 inches high, top and bottom wires No. 11, intermediate and stay wires No. 14½, 6-inch stays, per roll of 165 feet, $5.85.

No. 2158—58 inches high, top and bottom wires No. 11, intermediate and stay wires No. 14½, 6-inch stays, per roll of 165 feet, $6.50.

LIBERTY POULTRY FENCE

10-rod Roll,
4 feet high.... $4.00
5 feet high.... 4.66
6 feet high.... 5.28

ORNAMENTAL LAWN FENCE



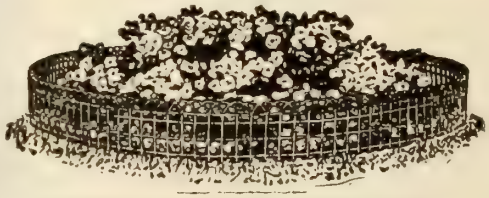
Very attractive and we believe the most durable wire lawn fence made. Heavy galvanized. Spaces, 1½ inches; wire, No. 9½ Crimped Pickets in No. 13 Tw. Cables.

Price, 36-inch, per foot, 16c; per 100 feet..... $14.00
Price, 42-inch, per foot, 17c; per 100 feet..... 15.25
Price, 48-inch, per foot, 19c; per 100 feet..... 17.50

In Rolls of 150 feet, deduct 1c a foot.

Single Loop—Per 100 ft., 36 in., $10.00; 42 in., $11.50; 48 in., $13.00.

FLOWER GUARD



Designed for protecting Flower Beds

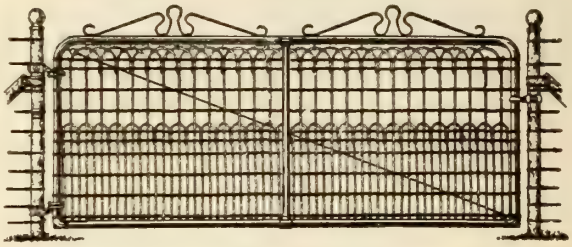
16-inch, per foot.....7½c 22-inch, per foot....8½c

100 feet or more, 1c per foot less.

TRELLIS WIRE

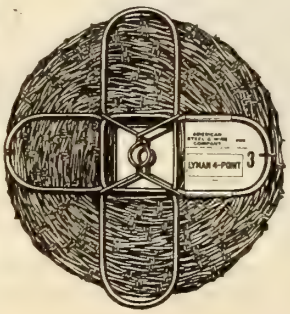
Trellis—18-inch, 9½c ft.; 24 inch.....10c ft.

ORNAMENTAL GATES



Heavy steel frames, filled to match the fence; fittings for Jr. 1¾ in. posts included.

Height	Distance Between Posts 3 ft.	3½ ft.	4 ft.	8 ft.	10 ft.
36-inch	$3.40	$3.55	$3.70	$8.15	$9.40
42-inch	3.55	3.65	3.80	8.30	9.60
48-inch	3.65	3.80	3.95	8.45	9.75



BARBED WIRE GALVANIZED

Hog—4-point, 12-gauge, 4 inches between barbs, 80-rod.....$3.50

Cattle—4-point, 12-gauge, 6 inches between barbs, 80-rod..... 3.25

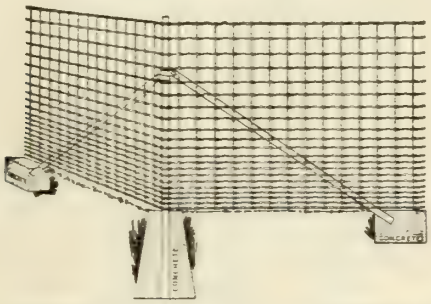
TUBULAR STEEL POSTS

	Painted	Galv.
5-foot	$ .36	$ .45
6-foot	.45	.55
6½-foot	.48	.58
7-foot	.52	.62
7½-foot	.56	.65
8-foot	.60	.70

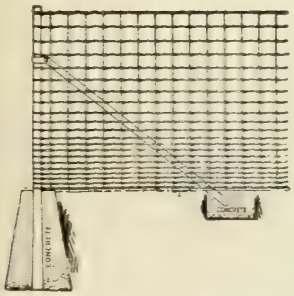
Special Prices on Quantities

Ball Tops for Line Posts, 23c; Pig-Ear Latch, 75c; Driving Caps for Line Post, 36c.

JUNIOR CORNER POSTS



Painted		Galvanized	
6-foot	$1.65	6-foot	$1.85
8-foot	2.20	8-foot	2.45



JUNIOR END POST

Painted

6-foot	$1.10
8-foot	1.45

Galvanized

6-foot	$1.30
8-foot	1.65

SELF-FASTENING U POSTS

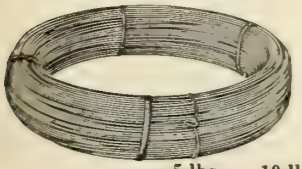
6-foot	$ .35	7½-foot	$ .47
6½-foot	.41	8-foot	.50
7-foot	.44		

CHAMPION WIRE STRETCHER

No. 1 has hickory handle and malleable clamp; can be quickly adjusted, and is a favorite with fence builders. Price, $1.50.

BALE TIES

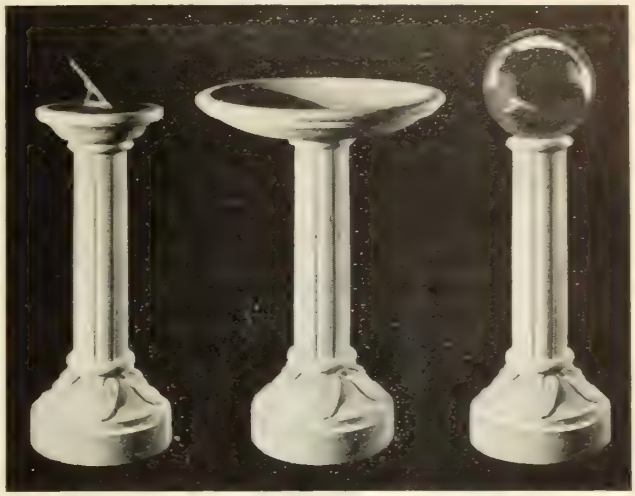
9½ feet, No. 14 gauge, bdl. 250.....$1.85



GALVANIZED FENCE WIRE

	5 lbs.	10 lbs.	25 lbs.	100 lbs.
No. 9	$ .30	$ .55	$1.25	$4.50
No. 14	.35	.60	1.40	5.30
No. 16	.40	.65	1.55	6.00
No. 18	.45	.75	...	....

GARDEN SET



In high fired light stony gray Terra Cotta. Enduring beauty for the garden throughout the seasons.

No. 85—Bird Bath, 34x33 inches.....$18.50

No. 86—Sun Dial, 33 inches high, complete with handsome 9½ inch bronze plate..... 20.25

No. 87—Gazing Globe, 40 inches high, complete with 10 inch guaranteed globe..... 19.25

BIRD HOUSES

59 58

73 57 76

BIRD HOUSES

No. 57—Woodpecker or Flicker.. $1.25

No. 58—Wren.. 1.45

No. 59—Blue Bird 1.45

No 73.—Wren.. 1.25

No. 76—Wren.. 1.25

GATOR-HIDE MULCH PAPER

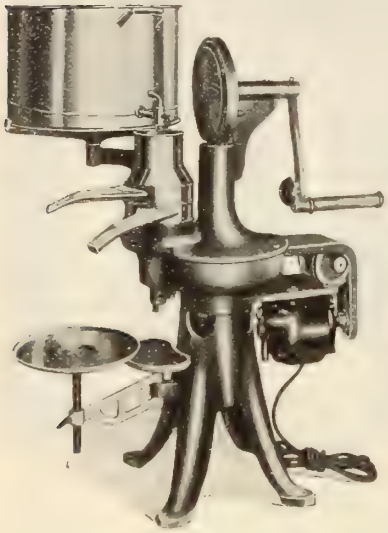
stimulates plant growth by increasing the temperature of the soil, by conserving moisture in the soil and by eliminating the weeds.

Type	Width	Length	Sq. Ft.	Per Roll
A (Light Weight)	18 in.	900 ft.	1350	$3.00
A (Light Weight)	36 in.	900 ft.	2700	6.00
B (Heavy Weight)	18 in.	450 ft.	675	3.00
B (Heavy Weight)	36 in.	450 ft.	1350	6.00

Substantial discounts on orders of 30 rolls or more.

DAIRY SUPPLIES

NEW E-Z AMERICAN SEPARATOR



No other separator gives you the advantages of the newly-developed American. Gets ALL the cream, low speed preventing frothing; bowl needs no rebalancing, new polished stainless steel discs, unmatched for easy turning, only separator with waist-low supply tank; greatest value for price charged. A size for any capacity. We offer the following three models for comparison.

Smaller models at exceedingly low prices. Let us quote.

No. 50, Regular Dairy Style, Upright—Capacity 500 pounds of milk per hour. Skims about 62 quarts in 15 minutes. **Price, $59.50.**

No. 50, Electric, with Standard make Motor, as shown in illustration. Price, Complete, $91.50.

BOSS CREAM SEPARATOR

Every small dairy should certainly have the Boss. It means one-quarter more cream of better quality and saves one-quarter the time. No machinery to run or look after. Separation is effected by circulation of cold water in outer can. All the cream rises to the surface in an hour or two and is drawn off sweet. Suitable for table use or other purposes.

2½	gallons, capacity 1 to 2 cows	$6.00
4	gallons, capacity 3 to 4 cows	6.50
6	gallons, capacity 4 to 5 cows	7.25
8	gallons, capacity 5 to 7 cows	8.00

TWIN SEPARATOR

Has many advantages over the separator with a single milk vessel; one can be used in the morning and the other in the evening. Made in 5 to 20 gallon sizes.

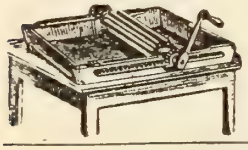
2 cans, 12 gallons, capacity 6 to 7 cows.....$14.25

DAIRY THERMOMETERS, each.....60c.
CREAM-TESTING TUBES, each.....60c.

PARCHMENT BUTTER PAPER

Is furnished in sizes 9x12, 6x9, 6x6. **Price, per pound, 25c.** By mail, add regular Parcel Post rate.

BUTTER WORKER



Inside Measurement	Cap.	Price
No. 1—23x36x2½ in.,	50 lbs.	$19.00
No. 2—20x36x2½ in.,	30 lbs.	16.50
No. 3—17x27x2½ in.,	20 lbs.	14.00

DANDELION BUTTER COLORING

Dandelion Brand Butter Coloring is guaranteed to be purely vegetable, and that the use of same for coloring butter is permitted under all Food Laws—State and National.

Will not color the buttermilk; will never turn rancid; gives the brightest and best color; butter never becomes reddish; perfect economy in use. It is cheaper than any other coloring. Put up in four sizes.

Small size to color 500 pounds.....$ .35
Medium size to color 1250 pounds..... .65
Large size to color 2800 pounds..... 1.00

MILK CANS

Made of special heavy cold rolled milk-can material. One of these cans will outlast two of the common light-weight cans. Sold at very attractive prices. 5-gallon size only.

No. 205—Umbrella Cover, 13 pounds empty, each.....$3.50

HUDSON COW STANCHIONS

No. 181—Steel U-Bar Stanchion with heavy steel fittings; no castings used. Cow-proof latch made of press steel. $2.50.

No. 181W—Wood-lined stanchion. $2.80.

No. 193—Made of high carbon U-Bar with or without wood linings. Patented, quick-acting latch, double lever type. Cow-proof. Adjustable neck space. Plain steel. $3.50.

No. 193W—Wood-lined stanchion. $3.90.

B-K

BACILI-KIL

Disinfectant Deodorant Antiseptic

A powerful non-poisonous germicide extensively used by dairies, poultry and stock farms. **10 oz., 50c; qt., 90c; 1 gal., $2.00.**

New Powder Form. 9 oz. bottle makes 1 gallon B-K solution, 75c.

KELLY DUPLEX GRINDING MILLS

The only mill manufactured which has double or duplex grinders. It has a grinding surface of just double that of any other mill of equal size, and therefore can do twice as much work; or as much work as any other mill twice its size. Grinds any kind of grain, cotton-seed, corn and cob, and corn, cob and shucks equally well, and produces a grist of any desired quality—coarse, medium or fine. Its shifting device for regulating the grinding is the most perfect known. A positive force feed, no choking; no end thrust on the main shaft under any conditions. Simple in construction, easily operated, strong, durable and efficient.

No. 1—3½ to 6 horsepower. Three feet 4 inches high, shaft 3 feet 6 inches long; capacity 8 to 18 bushels ear corn, according to power and speed. **Price, $57.00.**

No. 11, Junior—3 to 6 horsepower. Height 3 feet 2 inches, length of shaft 3 feet 2 inches; capacity 6 to 12 bushels ear corn, according to power and speed. **Price, $38.00.**

KOW-KARE

The Great Cow Tonic and Conditioner for toning up the appetite and stepping up milk production through its action as a stomachic of genuine merit, an alterative and general regulator of cows subjected to modern conditions of forced production.

1¼-pound can.....Price, $ .65
2¾-pound can.....Price, 1.25

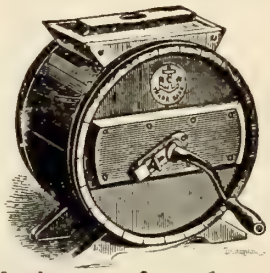
CONKEY'S FLY KNOCKER

The best preparation on the market for keeping flies off cattle and horses. Easily sprayed on and retains its strength all day, allowing the cows to pasture without annoyance, and therefore assists in the production of milk. **Qt., 60c; gal., $1.50.**

CONKEY'S CALF MEAL

Quality is of more importance in Calf Meal than in any other feed; it pays to buy the best. The advantages in feeding it are many. 1. It saves milk. 2. It costs less to feed. 3. It makes better veals. 4. You can raise your own dairy cows on it cheaper than they can be bought. 5. It leaves more milk to sell, and more profit to you. Satisfaction guaranteed. 25 lbs., $1.25; 100 lbs., $4.50.

CYLINDER CHURN



Made of selected white cedar and well put up.

Full Churning Capacity

Number	1	2	3	4
Gallons	1½	2	3½	6
Price	$4.00	$4.75	$5.50	$6.25

BARREL CHURN

Oak stave; steel top; it works by concussion and will not break the grain of the butter nor make it of a salvy consistency.

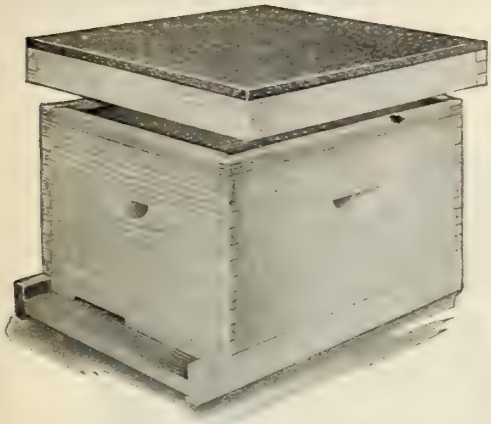
Number	0	1	2	3	4	5	6
Gals. ch'rn'd	3	5	7	10	13	18	30
Price	$6.00	$6.75	$7.50	$8.25	$10.50	$12.00	$16.50

BUTTER SHIPPING BOXES

20-pound prints	$13.75	40-pound prints	$19.75
30-pound prints	16.00	56-pound prints	23.75

HAND BUTTER PRINTS

½-lb. Seeley Pattern, as shown in cut .....$ .65
Baltimore Pattern 1.25
Round Print and Mould..... .40



One-story, 10-frame, metal-covered hive with frames and no foundation, K. D., $3.45. 5 for $15.55.

ROOT QUALITY BEE SUPPLIES

FRAMES	10	100
Hoffman Frames	$ .70	$5.55
Shallow Frames with thick top bars	.55	4.90

SECTIONS—PLAIN	100	500	1000
4¼x4¼x1⅞	$1.35	$6.45	$12.90
4x5x1⅜	1.25	5.95	11.90
4¼x4¼x1½	1.25	5.95	11.90

Split $1.00 per 1,000 extra.

FOUNDATION	10 Sheets	50 Sheets
Three Ply (8x16¾)	$1.00	$4.70
Medium Brood (8x16¾)	.85	4.00
Medium Brood (4½x16¾)	.52	2.50

Super Foundation (any size), 1 lb., 80c; 5 lbs., $3.60.

Let Us Send Complete Free Catalog

For Quick Service Mail Your Orders To Us. Prices F. O. B. Baltimore

GOULDS AUTOMATIC OILING PYRAMID PUMPS

Figure 1741

By adding an entirely automatic oiling power end to the famous "Pyramid" double-acting pump, GOULDS have a pump unsurpassed for general pumping service. Machine-cut gears operating in a bath of oil, impossibility of crankcase dilution, and long life are noteworthy features of this pump.

Size	Gals. per Minute	Speed R. P. M.	Suction and Discharge Size	Tight and Loose Pulleys	Price (Pump Only)
2x2	13	250	1¼	12x2½	$75.00
3x2¾	25	150	1½	15x2½	110.00
4x2¾	44	150	2	15x2½	140.00
5x4	82	125	2½	16x4	230.00

WOOD PUMPS

Porcelain Lined—Ready to Set in the Well
Subject to Cash Discount

Depth of Well	No. 2 6x6	No. 5 7x7	Depth of Well	No. 6 6x6	No. 4 7x7
8 ft.	$13.20	$15.80	29 ft.	$25.30	$27.30
9 ft.	13.60	16.20	30 ft.	25.90	28.15
10 ft.	14.05	16.55	31 ft.	26.90	29.15
11 ft.	14.40	16.85	32 ft.	27.90	30.15
12 ft.	14.65	17.15	33 ft.	28.90	31.15
13 ft.	15.00	17.45	34 ft.	29.90	32.15
14 ft.	15.25	17.75	35 ft.	30.90	33.15
15 ft.	16.00	18.30	36 ft.	31.90	34.15
16 ft.	16.50	18.90	37 ft.	32.90	35.15
17 ft	17.50	19.70	38 ft	33.90	36.15
18 ft.	18.15	20.50	39 ft.	34.90	37.15
19 ft.	18.50	20.80	40 ft.	35.90	38.15
20 ft.	18.80	21.20	41 ft.	36.90	39.15
21 ft.	19.30	22.50	42 ft.	37.90	40.15
22 ft.	20.00	23.00	43 ft.	38.90	41.15
23 ft.	20.70	23.70	44 ft.	39.90	42.15
24 ft.	21.00	24.00	45 ft.	40.90	43.15
25 ft.	21.35	24.35	46 ft.	41.90	44.15
26 ft.	22.30	25.30	47 ft.	42.90	45.15
27 ft.	23.40	25.90	48 ft.	43.90	46.15
28 ft.	24.70	26.25			

We shall be pleased to quote attractive prices on Galvanized Pipe.

GOULDS HYDRAULIC RAMS

GOULDS Hydraulic Rams are a very economical means of elevating water to storage tanks without outside power. Energy of the falling water does the work without attention or care. All working parts of bronze and will give a lifetime of service.

Fig. 1702—No. 3 Price, $18.00 **Fig. 1702—No. 4 Price, $23.00**
Fig. 1702—No. 5 Price, 31.00 **Fig. 1703—No. 6 Price, 55.00**

GOULDS SINGLE-ACTING DISTRIBUTING FORCE PUMP HEAD

Surface and Underground Discharge

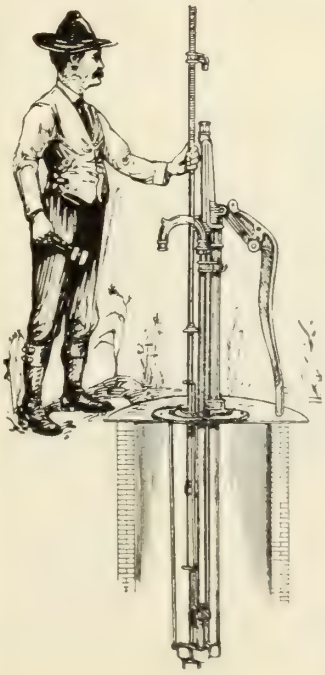
GOULDS Fig. 1482 is suitable for either hand or windmill operation and is good for lift and forces up to 135 feet. Underground discharge is 46 inches below base of pump and is operated by conveniently located handwheel. Adjustable 6, 8, 9 and 10-inch stroke.

Price, $21.00.

GOULDS "EMPIRE" DOUBLE-ACTING FORCE PUMP

With Guided Top and 3-Way Discharge

GOULDS Fig. 1731 Double-Acting Pump is built in 2 sizes with 2½x12-inch and 3x12-inch cylinder for hand, windmill or with use of jack, for power drive. An exceptionally well built pump for general farm use. Cylinders are brass lined. Either size, $25.40.



RED JACKET IRON EASY-TO-FIX PUMPS

Prices quoted below are Pumps ready to set in the well. Subject to Cash Discount.

Fig. 28 Depth of Well.	No. 1. 3-inch Cylinder. Double Act.	Fig. 37-4 Depth of Well.	2½-inch Cylinder. With 3-Way.
10 ft.	$20.85	28 ft.	$43.50
12 ft.	21.25	30 ft.	44.85
14 ft.	21.50	32 ft.	46.25
16 ft.	21.85	34 ft.	47.50
18 ft.	22.15	36 ft.	48.95
20 ft.	22.50	38 ft.	50.25
22 ft.	22.85	40 ft.	51.75
24 ft.	23.15	42 ft.	53.00
26 ft.	23.50	44 ft.	54.50

If 3-Way is not wanted for Fig. 37-4, deduct $5.50.

If 3-Way is wanted for Fig. 28, add $5.50.

Let us quote other sizes.

MISCELLANEOUS FARM SUPPLIES

ROOFING MATERIAL

SMOOTH SURFACED

	Weight Lbs.	Per Roll
Rain King, light	35	$1.05
Rain King, medium	45	1.35
Apex, light	35	1.10
Apex, medium	45	1.40
Apex, heavy	55	1.75
Battle Axe, light	35	1.00
Battle Axe, medium	45	1.15
Battle Axe, heavy	55	1.40
Contoid, medium	45	1.60
Contoid, heavy	55	1.90
Contoid, extra heavy	65	2.35
Contoid, super weight	75	2.80

SLATE SURFACED (Green)

Rain King	75	1.85
Balmar	75	2.00

TARRED SLATERS FELT

500 square feet	30	1.10

KURE-A-LEAK

A semi-liquid mastic or cement-like composition, not affected by extreme heat or cold; absolutely water tight and fireproof. It "kures" the leaks in wornout tin, galvanized iron or composition roofings. **1 gal., 75c; 5 gals., $2.15.**

CORRUGATED IRON ROOFING

Heavy galvanized iron corrugated roofing is always carried in stock in all the standard sizes. Prices subject to change. **$4.75 per square (100 square feet.)**

CHANNELDRAIN ROOFING

Made of

COP-R-LOY

The Copper-Alloyed Steel That Resists Rust and Corrosion

Channeldrain has a barrier to leaks—a vertical wall running the entire length of the lap—and no water gets by this wall. The channel formed by the patented design of Channeldrain roofing carries off the water before it can mount the ridge. This means that Channeldrain roofing goes farther than other metal roofing in doing what roofing is intended to do—IT DRAINS OFF ALL THE WATER THAT FALLS ON THE ROOF, permitting the surface to dry quickly and prevents rust under the laps and around nail holes. It is easy to understand the economy in roofing that has these advantages—and only Channeldrain has them.

You can apply Channeldrain yourself and enjoy the superior benefits of this modern patented roofing, with freedom from repairs through long years to come. It will save money for you. **28 gauge, 5½c per square foot.**

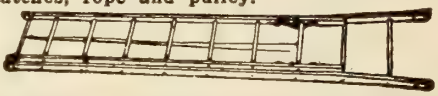
SAW FRAMES

Built of hard wood, mortised and tennoned, and full bolted; with Cold Rolled Steel mandrel; heavy balance wheel, and the table firmly hinged to frame--thoroughly braced and reinforced. The blades are made of genuine saw steel and have given universal satisfaction.

No. 5—With 24-inch Blade	$26.75
No. 9—All steel with 24-inch Blade	26.75
No. 4 "Pony Saw"—18-inch Blade	**17.00**

LADDERS

Made of the very highest quality lumber and assembled to give the safest, most durable and most rigid construction. Side rails made of the best selected Norway, Southern Pine or Spruce and the rungs are Hickory. Equipped with sturdy gravity catches, rope and pulley.

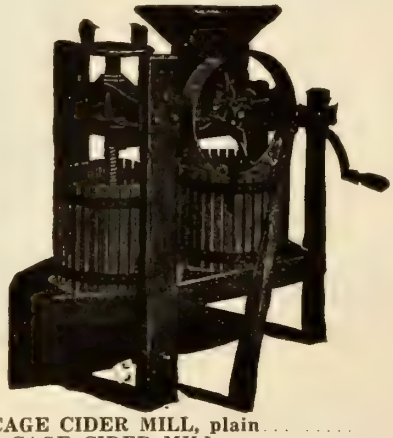


LIBERTY EXTENSION LADDERS

20 ft.	$ 9.50	24 ft.	$11.00
28 ft.	12.75	30 ft.	13.75
32 ft.	14.75	36 ft.	16.50
40 ft.	18.50		

STRAIGHT LADDERS, 10 to 22 ft. ..... Per foot, 34c

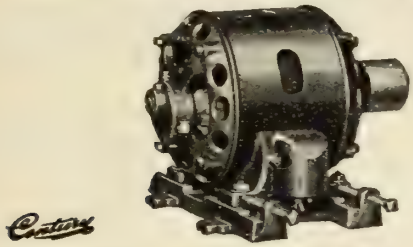
RED CROSS CIDER MILLS AND WINE PRESSES



SINGLE CAGE CIDER MILL, plain	$16.50
JUNIOR 2-CAGE CIDER MILL	19.75
MEDIUM 2-CAGE CIDER MILL	23.50
SENIOR 2-CAGE CIDER MILL	33.25
No. 1A FRUIT PRESS, Hinged Tub	7.25
No. 2C FRUIT PRESS, Hinged Tub	9.50
No. 3 FRUIT PRESS, Hinged Tub	15.00
No. 5 FRUIT PRESS, Hinged Tub	23.25
RATCHET EXTRA on Nos. 3 or 5	3.00

MISCELLANEOUS FARM SUPPLIES

CENTURY ELECTRIC MOTORS



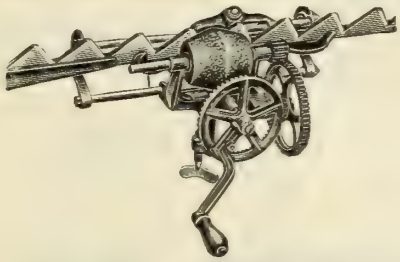
Repulsion Start Induction Single Phase Motors fill the demand for motors where high starting torque, low starting current, quiet and automatic operation are desirable.

The ¾ Horse Power and smaller are equipped with the Century Wool Yarn System of Lubrication, which insures proper lubrication for at least one year of continuous operation. The larger sizes are equipped with ring oilers. The brushes are in service and touch the commutator only while starting.

All prices listed below are for 110/220 volts, 60 cycle ratings, and they include pulley and belt tightening base with 1/3 Horse Power and smaller, and rails with larger sizes.

Horse Power	Syn. Speed	Standard Pulley Diam.	Face	Bore	Prices
⅛	1800	2	2	½	$20.50
¼	1800	2½	2½	⅝	23.25
½	1800	3	2½	¾	38.50
¾	1800	3	2½	¾	49.00
1	1800	3	3	¾	62.00
1½	1800	4	3½	1	80.00
2	1800	4	3½	1	103.00

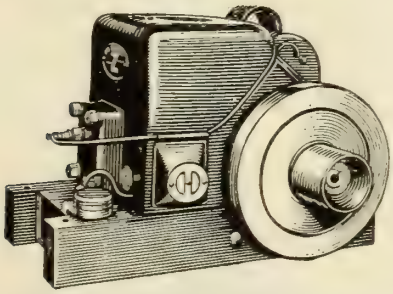
No. 82 TOOL GRINDER



This very useful grinder is especially suited to farm work and can be easily clamped to a mower wheel or bench; compact, simple and serviceable.

82 C —With Bevel Tool Wheel only.....$6.00
82 CW—With both Flat and Bevel Tool Wheels..... 7.00

FAIRBANKS MORSE TYPE "Z" ENGINES

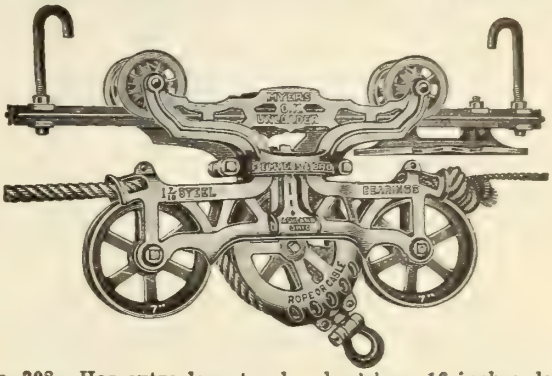


Compact, self oiling, fully enclosed and yet easily accessible. Designed to meet the present and future demands of users of small engines. Equipped with guaranteed ignition, Type "R" Rotary High Tension Magneto. Easy to start, magneto sealed against dirt, dust, water and oil. Let your next engine be a "Z" and learn what real dependability is.

1½ H. P.....$61.55 3 H. P.....$100.00

Let us quote larger sizes on request.
1½ Horse Power Illustrated.

MYERS' DOUBLE LOCK UNLOADERS



No. 208. Has extra long truck, wheel base 16 inches, large steel bearings, 7-inch sheaves, reversible and swivel, for double steel track, designed for heavy work. Price, $13.50.

MYERS' CLOVER LEAF UNLOADER

No. 118. This is the well-known reversible car for double steel track. The locking device grasps the fork pulley on either side and permits it to swing free. Price, $10.75.

Double Steel Track. Price, per foot, 25c.
Hanging Hooks. For double steel track. Price, each, 18c.
Rafter Brackets. Steel. Price, each, 6c.
Pulleys, 6-inch; wood sheaves; malleable iron frame. Price, each, 75c.
Pulleys. Knot-passing swivel; 6-inch malleable iron sheave. Price, each, 95c.
Double Harpoon Forks. All steel. Price, each, $2.75 to $6.50.
Floor Hooks, ¾-inch wrought iron. Price, each, 18c.

WAGNER BARNDOOR HANGER

Tandem, Ball-Bearing Rollers, per set.....$2.00
No. 15 Tubular Steel Track, per foot..... .25
No. 100 Evertight Steel Track, per foot..... .32
Steel Brackets, each..... .20

RURAL MAIL BOX

In order to better serve the patrons and with less effort on the part of the carrier, the Post Office Department adopted the new box and have provided a receptacle that will take the regular mail and parcels as well.

Body made of No. 20 gauge galvanized steel, door No. 18 gauge, bottom and rear No. 20 gauge. Inside of box has a corrugated drain board to provide for any water accumulation. Finished in aluminum bronze, flag bright red enamel. Size of box 23½ inches long, 11¼ inches wide, 14 inches high. Price, $2.50.

FOR SOIL IMPROVEMENT

	Lb.	10 lbs.	25 lbs.	100 lbs.
Aluminum Sulphate	$ .10	$ .50	$1.00	$3.75
Asparagus Salt		.20	.40	1.15
Cotton Seed Meal		.45	.85	2.45
Epsom Salts	.10	.65	1.25	4.50
Kainit (20%)	.05	.35	.60	1.75
Muriate of Potash	.10	.40	.75	2.25
Nitrate of Soda	.05	.35	.75	2.25
Sulphate of Ammonia	.10	.40	.75	2.50
Sulphate of Potash	.10	.50	1.00	3.00
Super Phosphate (20%)	.10	.40	.65	1.35
Tankage		.50	1.00	2.75
Top Soil		.25	.50	1.00
Wood Ashes		.50	1.00	2.50

Let us quote special prices on quantities.

GROUND TOBACCO STEMS

A finely ground, organic fertilizer material. An ideal and readily available source of ORGANIC Nitrogen and ORGANIC Potash. Does not burn tender roots. Apply at rate of 5 to 10 pounds per 100 square feet, or 1000 to 2000 pounds per acre for all truck crops, tobacco, fruit, tomatoes, potatoes, etc. Analysis 1¼-0-4½. **10 lbs., 35c; 25 lbs., 70c; 100-lb. bag, $1.85; ton, $30.00.**

PURE RAW BONE MEAL (Extra Fine)

An excellent fertilizer, especially recommended for lawns, rose bushes, grape vines, and deep-rooted shrubbery, where it is desired to furnish the plants with a perfectly safe, slow-acting but continuous supply of nourishment. Florists and nurserymen use large quantities of our bone meal very successfully. **10 lbs., 45c; 25 lbs., 85c; 50 lbs., $1.50; 100-lb. bag, $2.50.**

STEAMED BONE MEAL (Bone Flour)

100 lbs., $2.25.

PULVERIZED SHEEP MANURE

The Sheep Manure we are selling proves its quality by its analysis. Maryland State inspection figures:

	Guaranteed Percentage	Found to Contain
Nitrogen	1.25	1.78
Phosphoric Acid	1.00	1.90
Potash	2.00	3.80
Total	4.25	7.48

5 lbs., 20c; 10 lbs., 35c; 25 lbs., 75c; 100-lb. bag, $2.00; ton, $35.95.

SOIL-PREP

Scientific soil conditioner and plant food. **5-lb. bag, 30c; 10-lb. bag, 50c; 25-lb. bag, $1.15; 50-lb. bag, $2.00; 100-lb. bag, $3.50.**

COW MANURE

SHREDDED. 5 lbs. 30c; 10 lbs. 50c; 25 lbs. 90c; 50 lbs. $1.50; 100 lbs. $2.50.

LAND PLASTER

80-lb. bag, 90c; ton, $19.00.

HYDRATED LIME

Especially useful for correcting acid condition of soils in gardens and lawns. **50-lb. bag, 50c. Let us quote ton prices.**

ADCO

Is a powder, which, when mixed with almost any non-woody vegetable waste, and kept wet, gradually converts it into manure.

50 pounds of ADCO makes a ton of manure. Equal to stable manure—Odorless. Prices: 150 lbs., $10.50; 25 lbs., $2.00; 7½ lbs., 85c.

FISH BONE POTASH FERTILIZER

FOR BETTER PRODUCTION

Guaranteed Analysis

The Commercial Fertilizers which we offer are made by one of Baltimore's largest and most reliable manufacturers. Animal base products are consistently used, making a plant food which in its chemical action in the soil is best suited for continuous growth of the crops .

Analysis	Recommended for	Per Ton	Bag 167 lbs.
2– 9– 5	Grain Crops	$23.90	$2.40
4– 8– 5	Beans, Cantaloupes, Peas, etc.	27.05	2.70
3–12– 6	Corn, Main Crop Tomatoes	28.45	2.85
4– 8–10	Beets, Carrots, Potatoes, Radishes, Turnips	30.00	3.00
5–10– 5	General Truck Crops	30.30	3.00
6– 6– 5	High Grade Truck	31.05	3.10
10– 6– 4	Special Top Dresser, Cabbage, Kales, Lettuce, Spinach, etc.	38.15	3.80
Bone Meal, Raw		46.00	
Bone Meal, Steamed		43.00	
Ground Tankage, 6%		48.90	
Nitrate of Soda, 100-lb. bags		36.11	
Sheep Manure		35.95	

Ton prices include delivery to farm. Less 10% C. O. D. If hauled from factory or factory warehouse deduct $1.50 per ton.

BLOOD MEAL

10c per lb.; 3 lbs., 25c; 25 lbs., $1.50; 100 lbs., $4.00.

NITROPHOSKA

Analysis: 15 per cent Nitrogen, 30 per cent Phosphoric Acid, 15 per cent Potash.

A wonderful fertilizer for lawns, shrubs, flowers and vegetables. Is three to five times as rich in actual plant food as the ordinary commercial fertilizers. **Lb. 25c; 10 lbs. $1.50; 25 lbs. $2.75; 50 lbs. $4.75.**

PLANTABBS

30 Tablets, 25c; 75 Tablets, 50c; 200 Tablets, $1.00; 1000 Tablets, $3.50. (By mail add 10%.)

The Original Legume Inoculator

NOBBE-SHUNER PROCESS

NITRAGIN

Restores and Maintains Soil Fertility

INOCULATOR PRICES

When Ordering, Always Specify Name of Seed

Alfalfa, all Clovers

Size	Retail
½ bu. ea.	$ .35
1 bu. ea.	.55
2½ bu. ea.	1.20

Vetch, Austrian Peas, Canadian Peas, Beans

Size	Retail
½ bu. ea.	$ .30
1 bu. ea.	.45
*1⅔ bu. ea.	.65
5 bu. ea.	1.85
*12½ bu. ea.	4.25

*"100 lb. size." Packed only for Vetch and Peas.

LESPEDEZA

Unhulled or Hulled

Size	Retail
1 bu. ea.	$ .35
2 bu. ea.	.55
5 bu. ea.	1.20

Peanuts, Soy Beans, Cow Peas, Lima Beans

Size	Retail
1 bu. ea.	$ .35
2 bu. ea.	.55
5 bu. ea.	1.20
10 bu. ea.	1.75
*25 bu. ea.	3.75

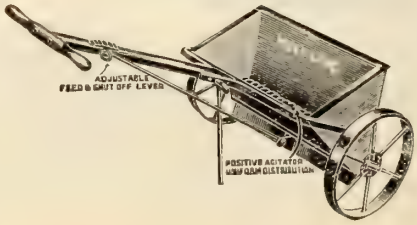
*"25 bu. size." Packed only for Soy Beans, Cow Peas.

New Garden Size NITRAGIN for Garden Peas, Beans, Sweet Peas, Lima Beans and Lupines

Each package will inoculate any amount up to 4 lbs. seed.

Retail Price $.10 ea.

SPREADERS



Size at top 12x21 inches, and 10 inches deep. Capacity about 2½ pecks. Weight 25 pounds. **$6.00.**

E-Z — Cheap but practical — 85c ea.

Hyper-Humus

Mr. W. E. Hartman of the National Academy of Sciences says: "I believe that **Hyper-Humus** is responsible for the general excellence of both lawn and plantings." For many years the U. S. Government has used **Hyper-Humus** in the landscaping and planting of many of its Public Buildings, Post Offices, and Parks. It meets the Government's standard for landscaping, and is approved for Government plantings in Washington and throughout the East.

FIVE HYPER-HUMUS VALUES

1 Hyper-Humus is literally a **workshop** for bacterial conversion. The millions of beneficial bacteria in Hyper-Humus gives life and fertility to your soil.
2 Hyper-Humus is a **storage-house** of soil organics . . . plant food awaiting plant call.
3 Hyper-Humus is a **reservoir** of normal moisture, assisting food conversion, and coming to the aid of your plants when they need it.
4 Hyper-Humus is a **regulator** of temperature and air . . . so vital to plant life.
5 Hyper-Humus has perfect **friability** . . . it is easy and pleasant to use; absolutely free from odor and from weed-seeds.

Humus makes rich loamy garden soil out of common dirt. Added in sufficient quantity it will give the soil the proper texture, help hold the right amount of moisture, and retain plant foods for natural plant stimulation.

AMOUNT TO APPLY PER SQUARE FOOT:
NEW LAWNS, 1 to 3 lbs.; OLD LAWNS, 1 to 2 lbs. GARDENS AND FLOWER BEDS, 2 to 4 lbs.

In addition to the directions for general use, the following specially prepared Bulletins are available:

How to Build a Lawn
The Flower Garden
Gardening with Rocks and Flowers
Hyper Humus . . . First aid to Gardening
Hyper Humus for Roses
The Vegetable Garden

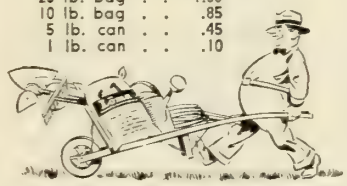
10 lbs. 35c; 25 lbs. 65c; 100 lbs. $1.75; 500 lbs. $7.50; 1000 lbs. $10.00; ton $17.50. Let us quote 5 ton and carload lots.

NOTE: It is suggested that you add 1 pound of an approved non-toxic plant food to every 10 pounds of Hyper-Humus.

Lōma

A balanced ration of all the Elements science has discovered plants must have to thrive. Clean, odorless, easy to handle. 100% effective. The best thing *on earth* for lawns and gardens.

100 lb. bag	$4.00
50 lb. bag	2.50
25 lb. bag	1.50
10 lb. bag	.85
5 lb. can	.45
1 lb. can	.10



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Promotes Growth by Improving Texture of Soils and Regulating Supply of Moisture
Investigate its Many Advantages

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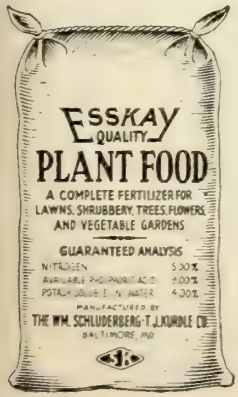
Junior Bale, 10 bushels.....$1.50
Large Bale, 22 bushels..... 2.25

3 qts., 10c; 1½ pks., 25c; 1 bu., 50c; 3 bu., $1.00

Special Prices on Larger Quantities

ESSKAY QUALITY PLANTFOOD



(Analysis: 5-9-4)

A complete organic fertilizer consisting of blood, bone meal, tankage and potash scientifically blended for Flowers, Lawns, Vegetables, Trees and Shrubs. It builds up the soil and leaves no acid residue.

100-lb. bag	$3.50
50-lb. bag	2.35
25-lb. bag	1.50
10-lb. bag	.75
2-lb. bag	.25

This photograph was made of a test on asters. One plant was fed 11 elements; all others were fed 10 elements. One element was withheld as indicated. Here is proof that it's wise to use a plant food that supplies all eleven elements.

Tests show way to Gardening Success

How different the home pictured above would be without the beautiful lawns, flowers, shrubs, and trees. It's growing things that make it a beautiful home.

A recent series of tests conducted by a large midwestern university demonstrate the importance of proper plant feeding in achieving gardening success. As the picture shows, even the lack of so-called "minor" elements, manganese and sulphur, as well as lack of potash, greatly retards plant growth.

Beautify your home with shrubs, trees, lawns, and flowers. Make sure they are supplied with the food elements needed for fine, sturdy growth. Feed them Vigoro, the Complete Plant Food that contains *all eleven* of the plant food elements scientists have proved plants require from the soil.

Vigoro is economical . . . you need very little. It's clean, odorless, and sanitary . . . especially prepared for home use.

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5-lb. pkg.	$ .45
1-lb. pkg.	$ .10

F. O. B. Baltimore

Made by Swift especially for Lawns, Flowers, Shrubs, Trees, and Vegetables

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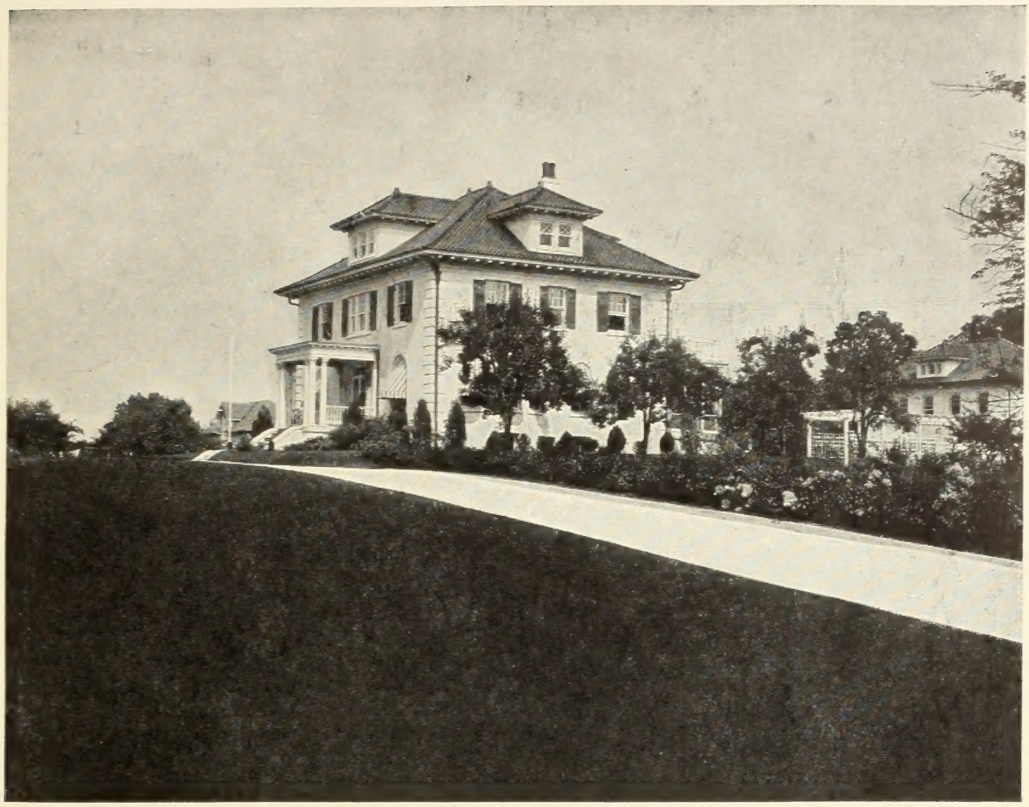

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IN 5 LB. PACKAGES

Evergreen 27¢ lb. in 5 lb. Packages

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Lawn Grass Seed is not a distinct standard variety which can be sold at a standard market price, but is a mixture containing many varieties blended to meet certain requirements. The price is determined entirely by the value and proportions of the various grasses used in the mixture.

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